

There's another way!

The mistake is that...

I've spotted...

# I SEE REASONING - KS1

TASKS FOR ENRICHING  
MATHEMATICAL TALK

# SAMPLE

is the same...  
but different...

different...  
differently...

I can  
show you!

This picture  
shows...

The pattern  
is...

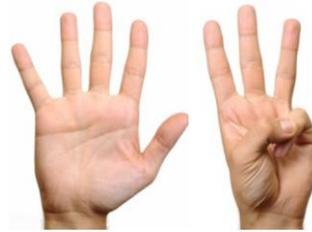
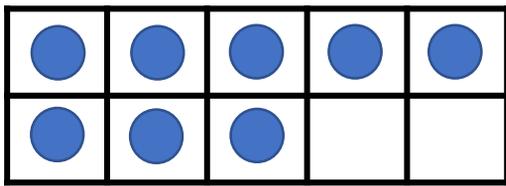
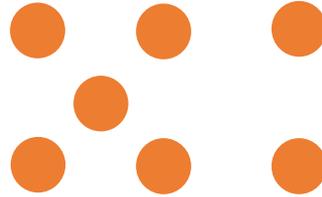
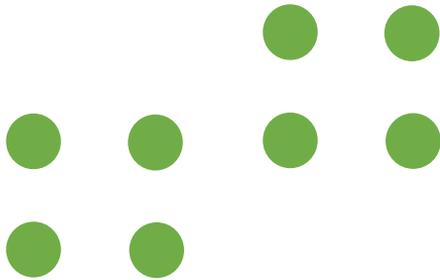
I've noticed  
that...



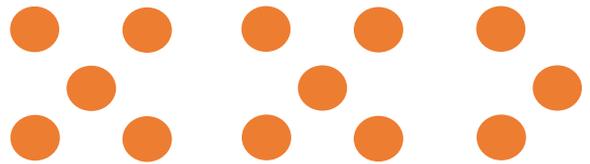
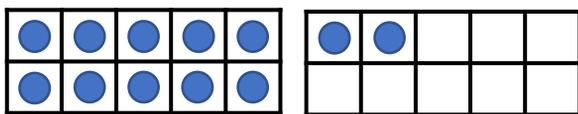
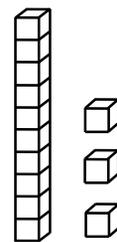
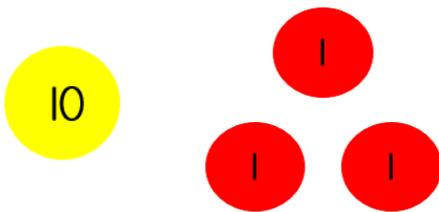
by GARETH METCALFE

Instant digital download  
in PDF format

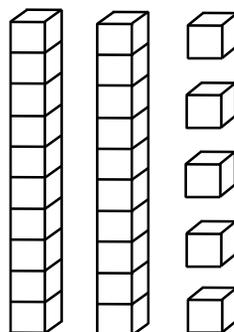
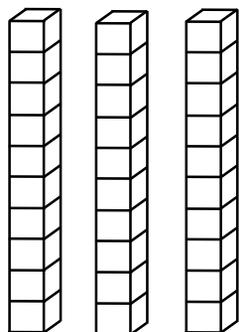
# Odd one out



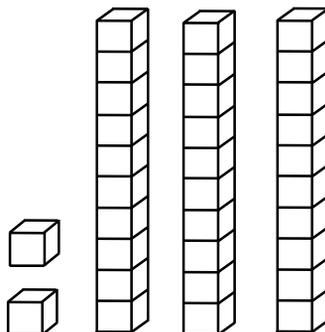
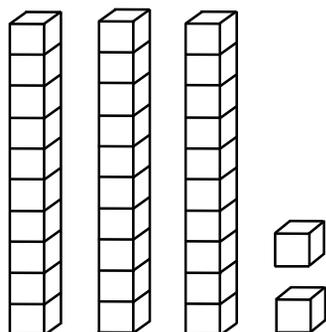
# Odd one out



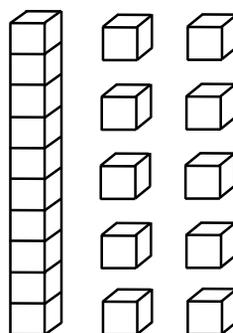
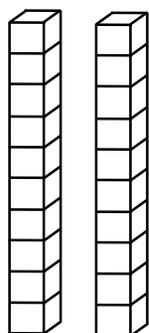
## Spot the difference



## Spot the difference



## The same... different...



# Is it sixteen? ✓ x

Is it sixteen?

61

Is it sixteen?

Is it sixteen?

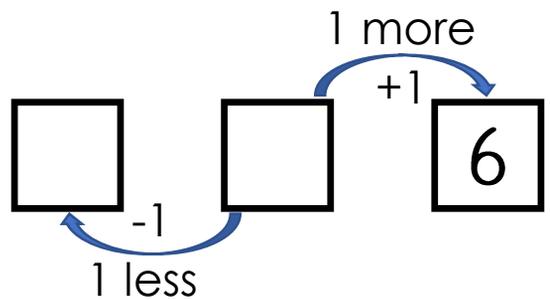
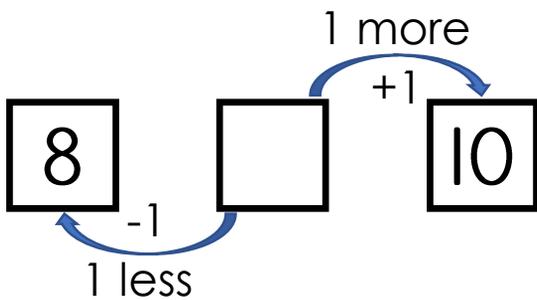
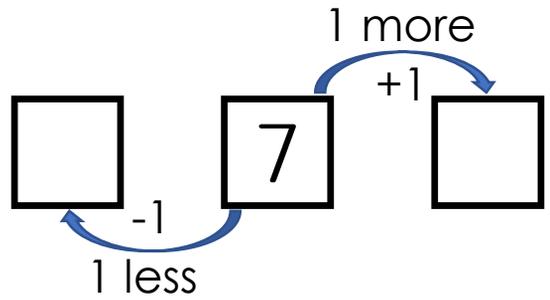
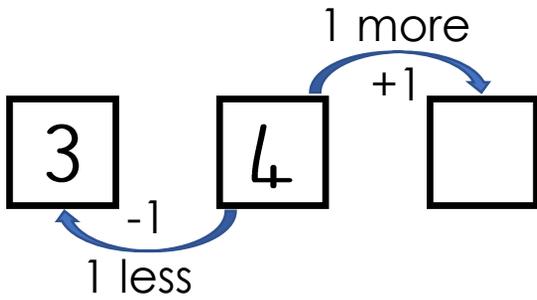
Is it sixteen?

Is it sixteen?

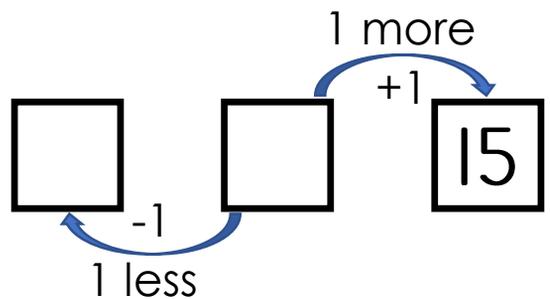
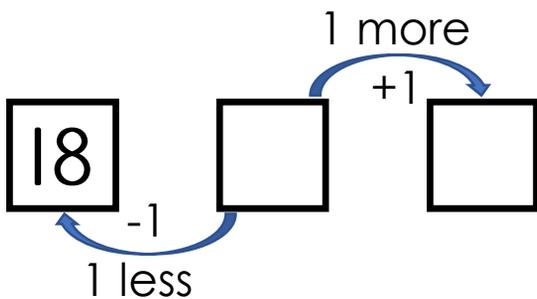
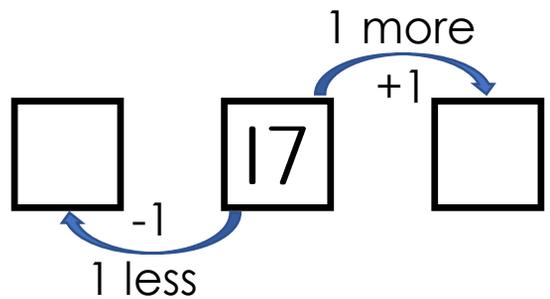
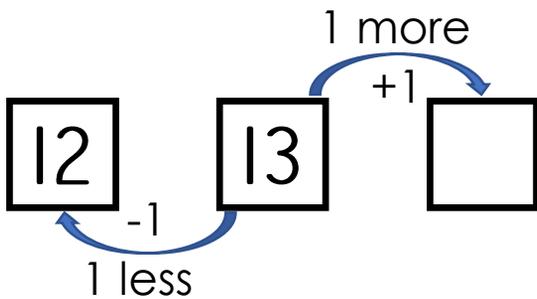
# Is it 23? ✓ x

Is it 23?

# Fill the gaps



# Fill the gaps



## Fill the gaps

<b>five</b>	5										
<table border="1"> <tr> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>	●	●	●	●	●						
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	8										
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	9										
<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>											

<b>seven</b>											
<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td> </tr> </table>											

- one
- two
- three
- four
- five
- six
- seven
- eight
- nine
- ten

## Fill the gaps

<b>fifteen</b>	15																				
<table border="1"> <tr> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td> </tr> <tr> <td>●</td><td>●</td><td>●</td><td>●</td><td>●</td> <td></td><td></td><td></td><td></td><td></td> </tr> </table>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
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	12																				
<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td><td></td> </tr> </table>																					

<b>eighteen</b>																					
<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td><td></td> </tr> </table>																					

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●	●	●	●	●	●	●	●	●	●												
●	●	●	●	●	●	●															

- ten
- eleven
- twelve
- thirteen
- fourteen
- fifteen
- sixteen
- seventeen
- eighteen
- nineteen
- twenty

# Fill the gaps

> < =

>

□

□

□

>

<

draw dots

draw dots

# Fill the gaps

> < =

<

□

□

□

True or false?

$$3 + 1 < 4$$

$$3 = 3$$

$$5 > 4 + 2$$

True or false?

$$22 = 12 + 10$$

$$24 > 14 + 10$$

$$20 + 6 > 24$$

Different ways

$$10 > \square + 6$$

$$10 > \square + 6$$

$$10 > \square + 6$$

# Class Count

**Count in 2s**

Challenge part 1

1	2	3	4	5		7	8	9	10
11		13	14	15	16	17	18	19	20

**Count in 2s**

Challenge part 2

1	2	3	4	5		7	8	9	
11		13	14	15	16	17		19	20

**Count in 2s**

Challenge part 3

1		3	4	5		7	8	9	
11		13		15	16	17		19	20

# Class Count

**Count in 5s**

Challenge part 1

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24		26	27	28	29	30
31	32	33	34	35	36	37	38	39	
41	42	43	44	45	46	47	48	49	50

**Count in 5s**

Challenge part 2

1	2	3	4	5	6	7	8	9	
11	12	13	14	15	16	17	18	19	20
21	22	23	24		26	27	28	29	30
31	32	33	34	35	36	37	38	39	
41	42	43	44		46	47	48	49	50

# Class Count

**Count in 5s**

Challenge part 3

1	2	3	4		6	7	8	9	
11	12	13	14	15	16	17	18	19	
21	22	23	24		26	27	28	29	30
31	32	33	34	35	36	37	38	39	
41	42	43	44		46	47	48	49	50

## Spot the mistakes

**Count up and down in 1s**

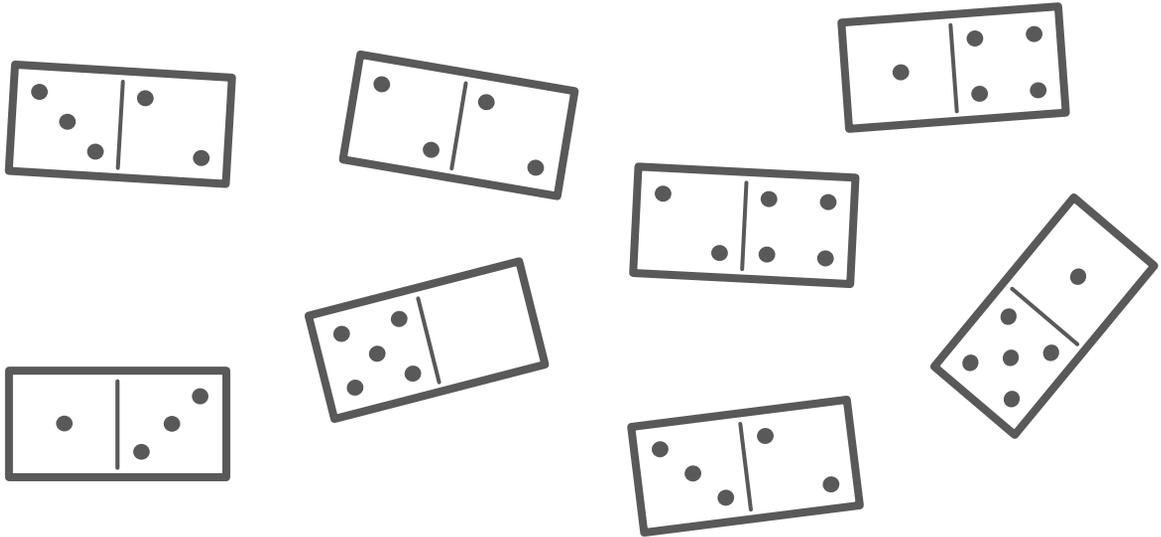
13, 14, 16, 17

27, 28, 29, 210

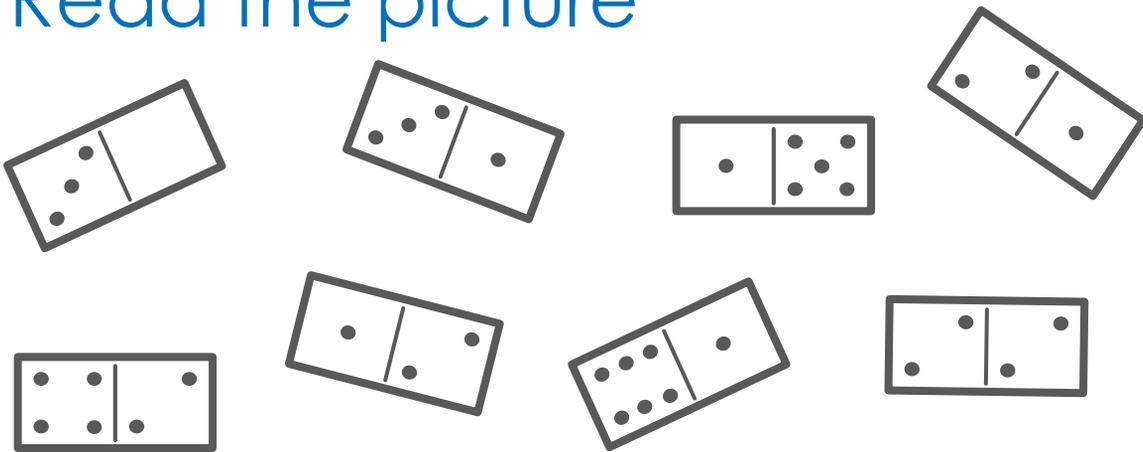
32, 31, 30, 20

# Read the picture

**Circle the dominoes with 5 dots:**



# Read the picture

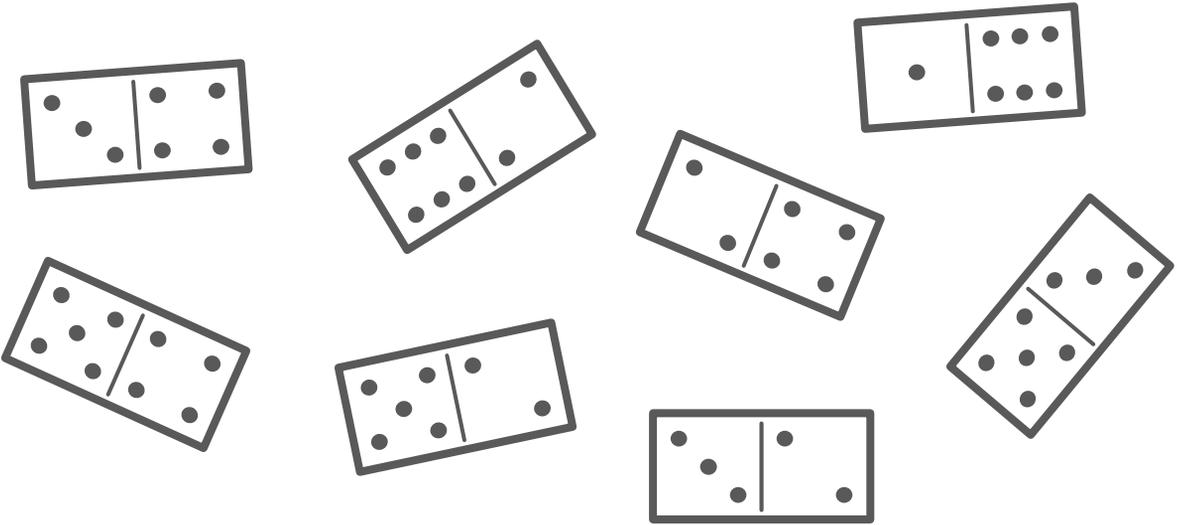


dominoes with  dots

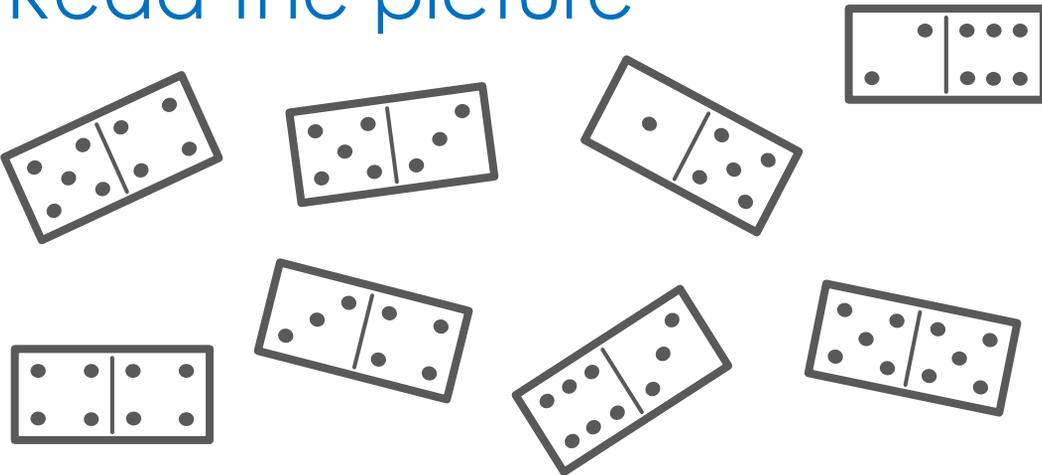
dominoes with  dots

# Read the picture

**Circle the dominoes with 7 dots:**



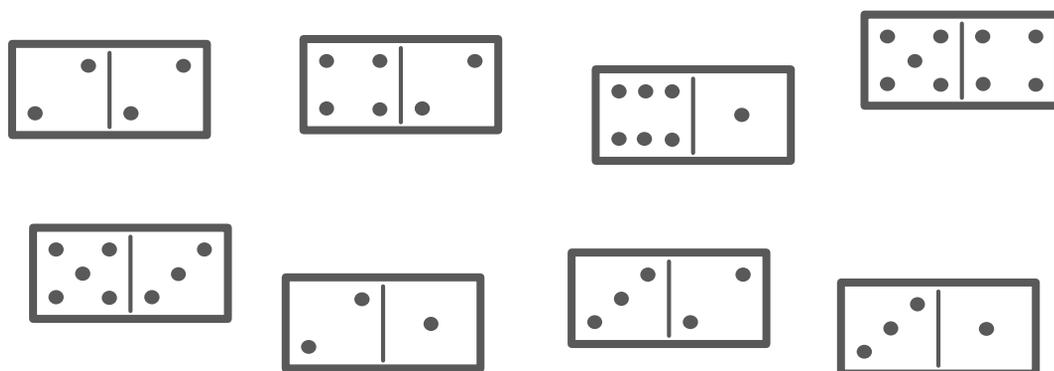
# Read the picture



dominoes with  dots

dominoes with  dots

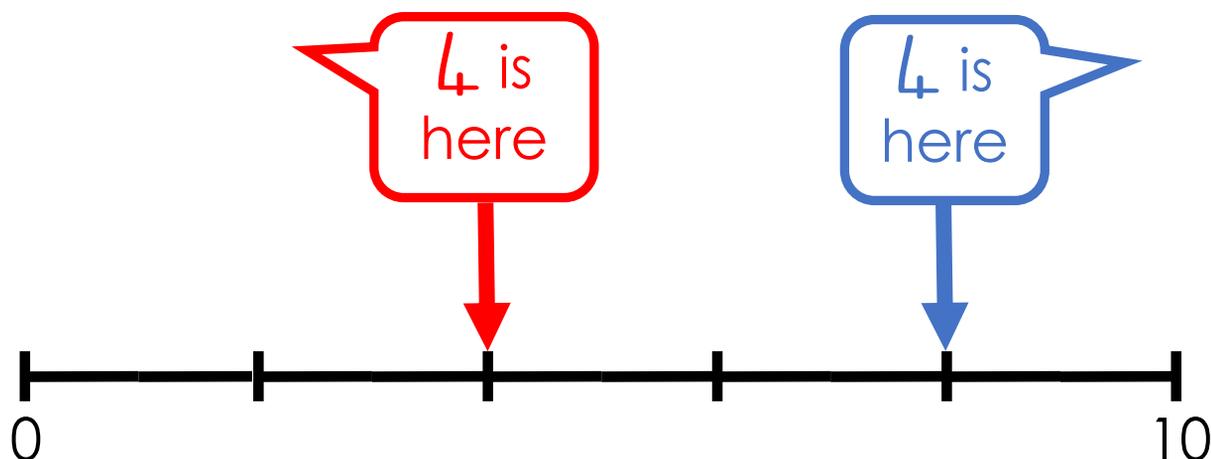
# Read the picture



dominoes with more than  dots

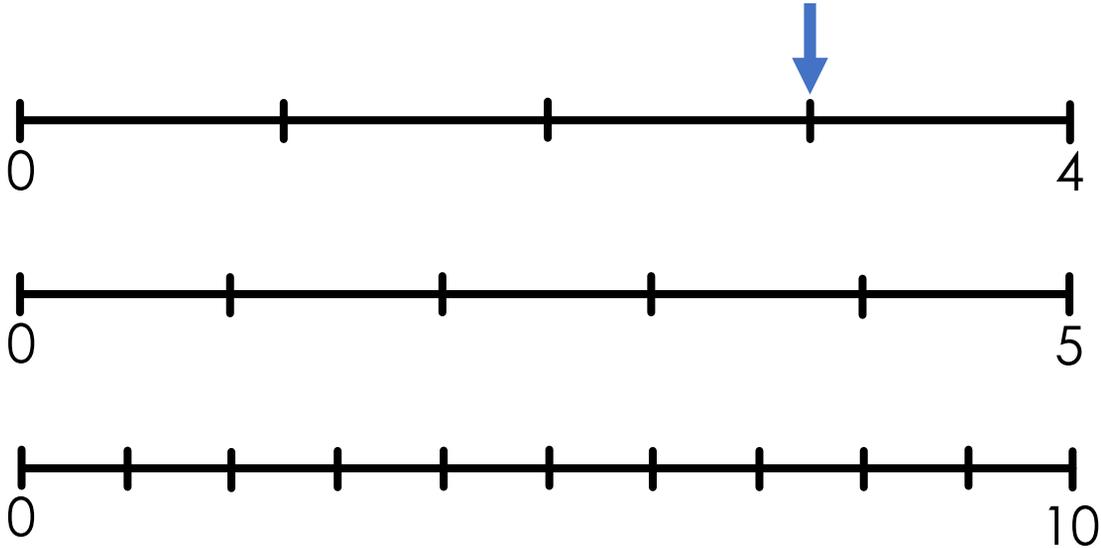
dominoes with less than  dots

## Which answer?



# Number lines

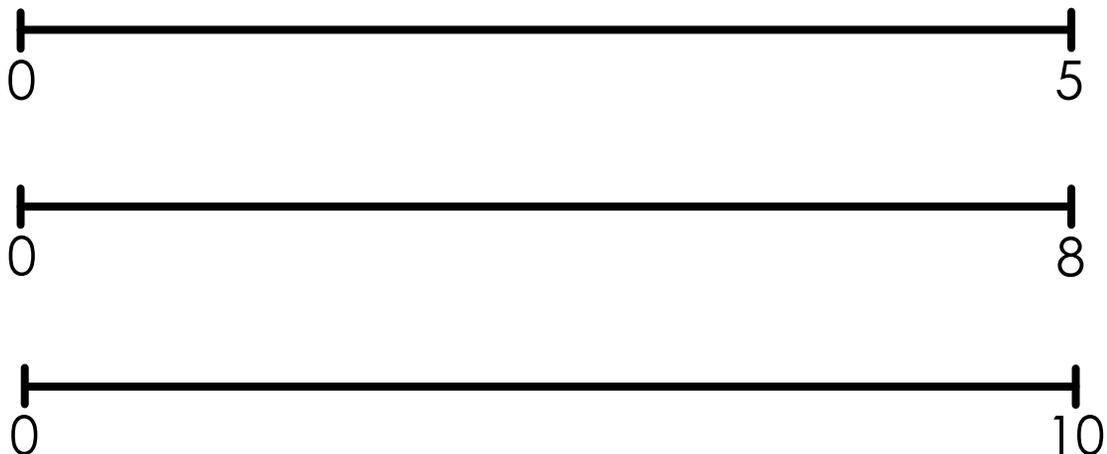
Show **3** on each number line.



*What do you see?*

# Number lines

Show **4** on each number line.



# Number lines

Show **8** on each number line.



# Number lines

**Fill the gaps:**

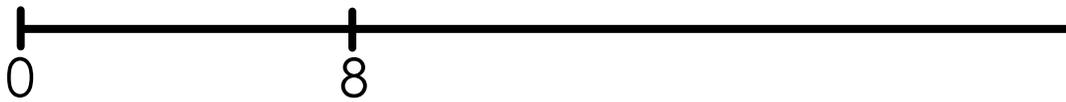
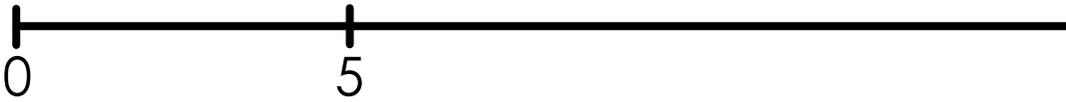




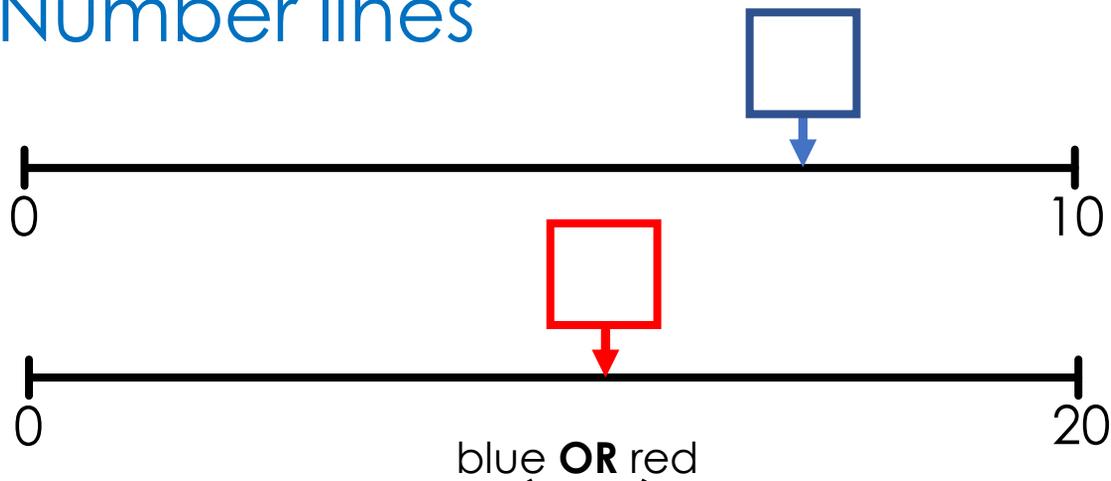


# Number lines

Show **10** on each number line.



# Number lines

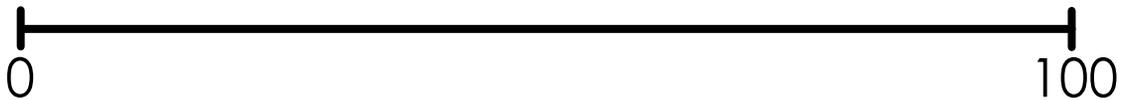
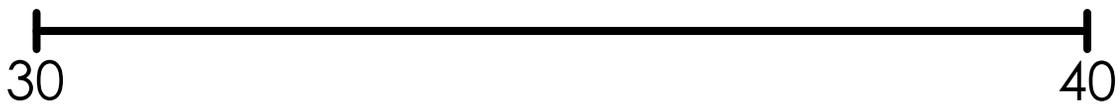
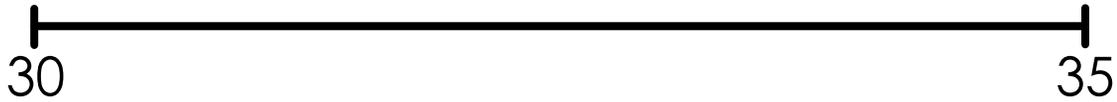


blue **OR** red

The number in the  box is larger.

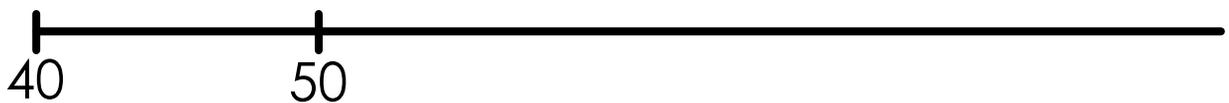
## Number lines

Show **34** on each number line.



## Number lines

Show **80** on each number line.



# Missing numbers

Fill in the **red boxes**.

1		3			6	7			
					16				
		23							
31				35			38		
						47			50

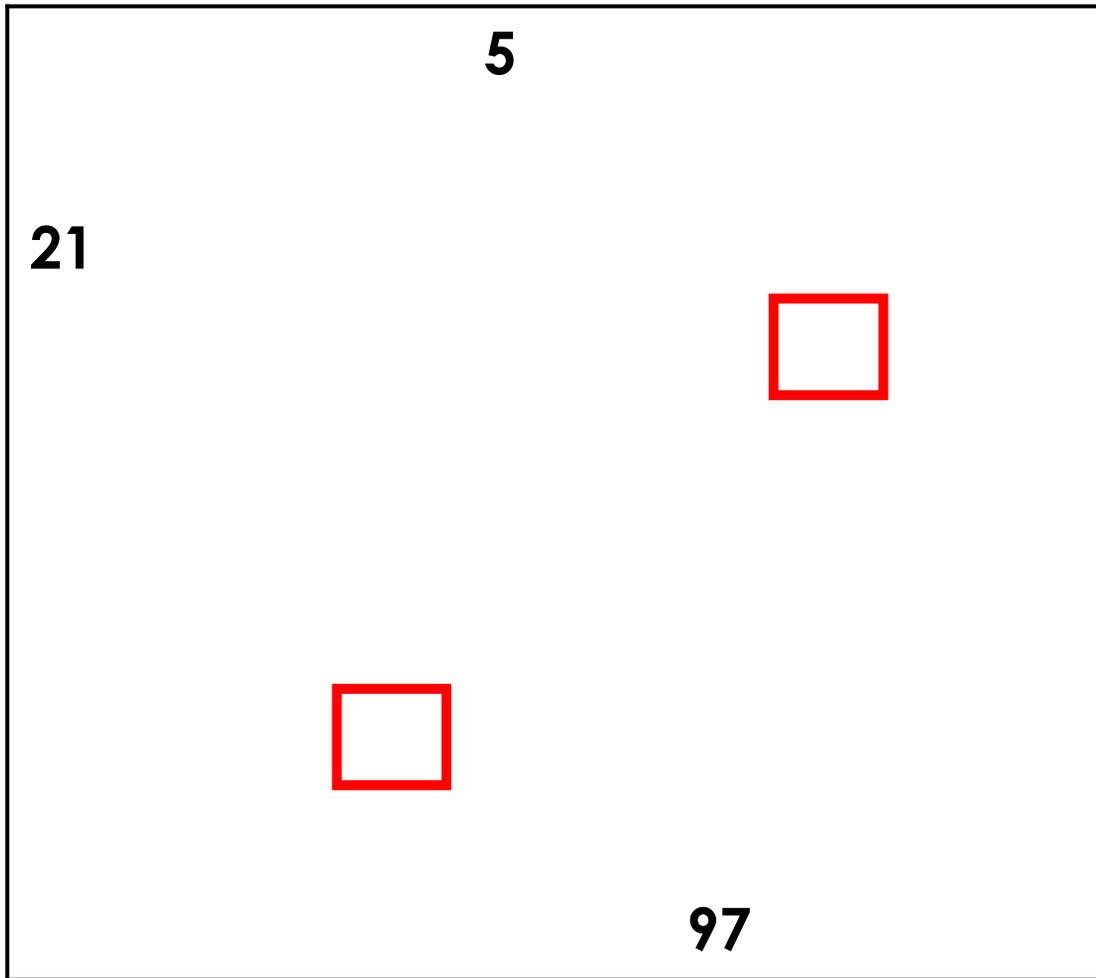
# Missing numbers

Fill in the **red boxes**.

				5					
11	12					18	19		
				35	36				
					46				50

# Missing numbers

What numbers could be in the **red boxes**?



# Missing numbers

What numbers are in the **red boxes**?

				5					
21									
						97			

# Missing numbers

Fill in the **red boxes**.

	2	3		5				
			<input style="border: 2px solid red; width: 30px; height: 30px;" type="text"/>		17	18		<input style="border: 2px solid red; width: 30px; height: 30px;" type="text"/>
	<input style="border: 2px solid red; width: 30px; height: 30px;" type="text"/>	23			27			
31	32	33			<input style="border: 2px solid red; width: 30px; height: 30px;" type="text"/>			
								49 50

Fill the gaps

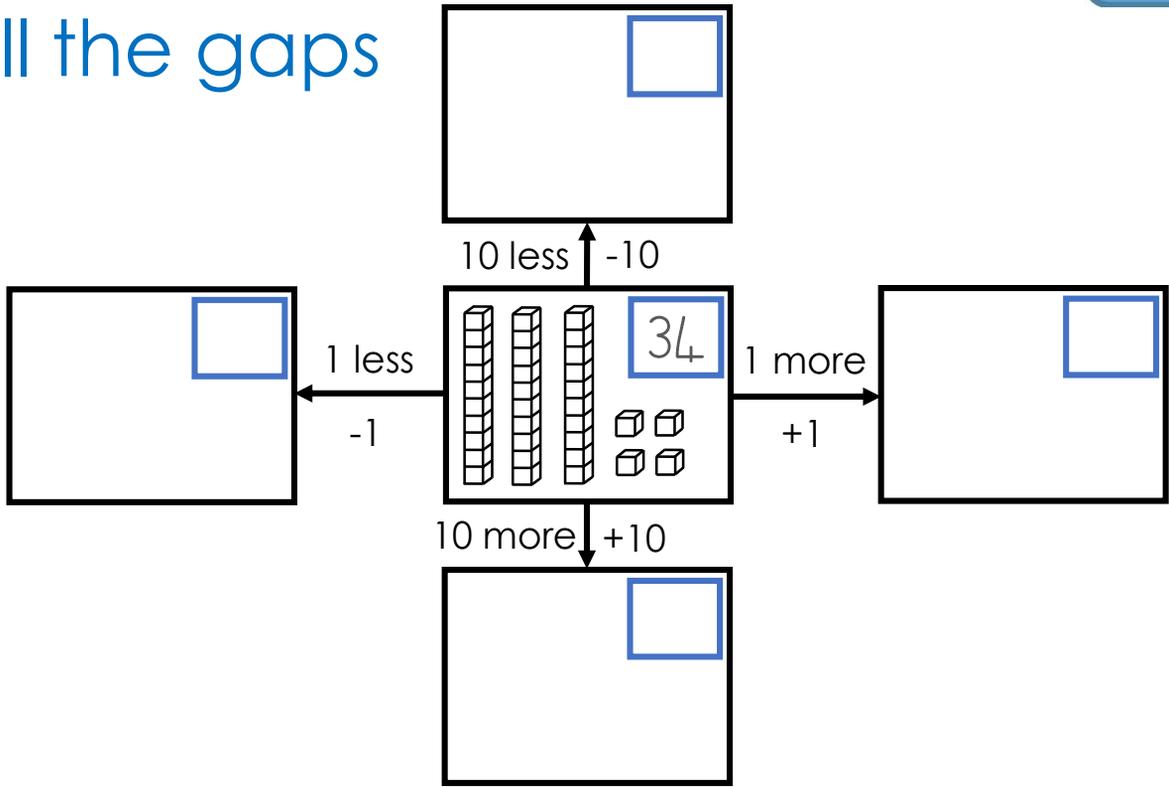
10 less  $-10$

1 less  $-1$

1 more  $+1$

10 more  $+10$

Fill the gaps



True or false?

✓ ✗

$$74 + 1 = 84$$

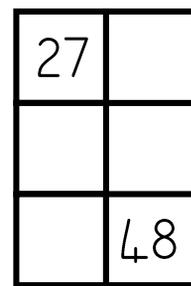
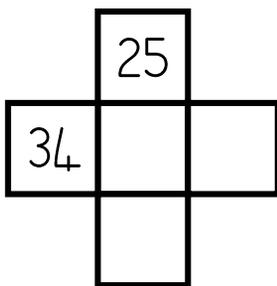
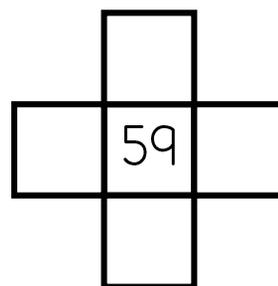
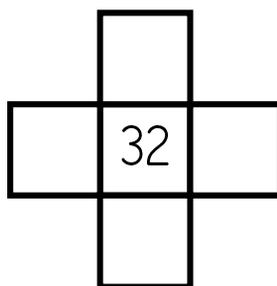
$$26 - 1 = 25$$

$$43 + 10 = 53$$

$$26 - 10 = 36$$

# Fill the gaps

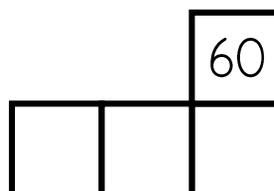
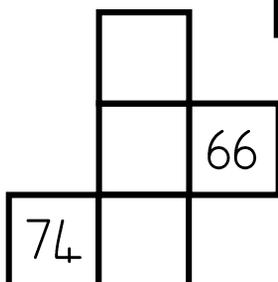
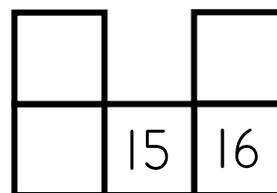
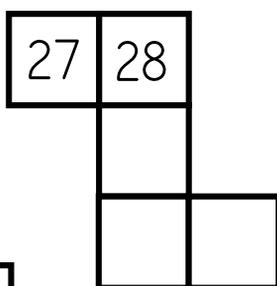
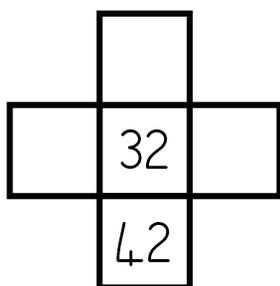
1	2	3	4	5	6	7	8	9	10
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31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



# Fill the gaps

These shapes are from a 100-square.

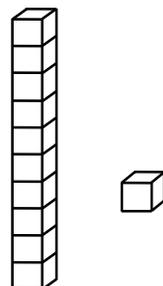
**Fill in the missing numbers.**



## Different ways

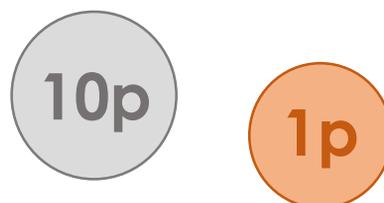
**Make 32 using 10s and 1s**

**Do in different ways**



## How many ways?

Use **10p** and **1p** coins



**Make 24p**

**How many ways can you do it?**

## Investigate

Use these digits:



Make a 2-digit number  
and a 1-digit number.



**Make the difference between the numbers small.**

# Explain the mistake

$$5 + 3$$

5, 6, 7



# Spot the difference

$$6 + 3$$

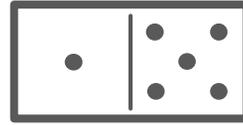
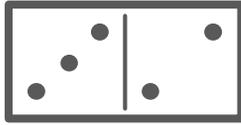
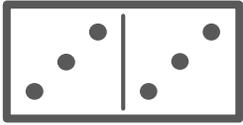
$$6 + 3$$



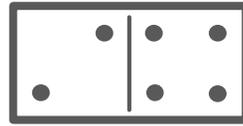
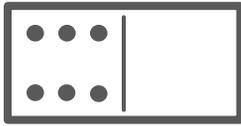
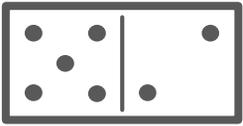
8

9

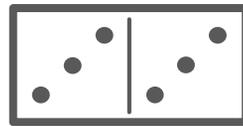
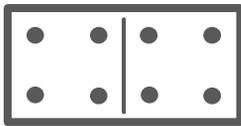
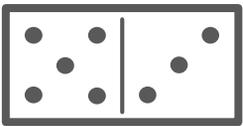
Odd one out



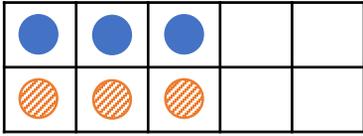
Odd one out



Odd one out

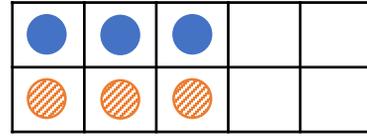


I know... so...



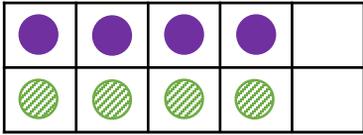
$$3 + 3 = 6$$

$$4 + 3 = \square$$



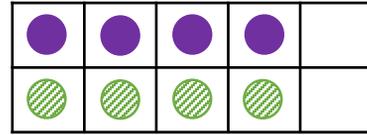
$$3 + 3 = 6$$

$$5 + 3 = \square$$



$$4 + 4 = 8$$

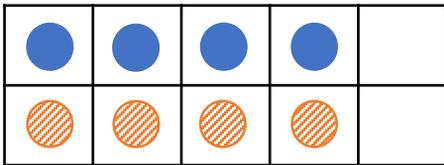
$$4 + 5 = \square$$



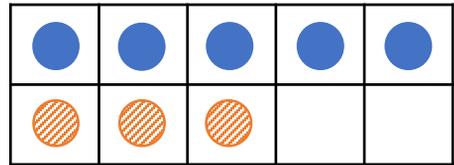
$$4 + 4 = 8$$

$$\square + 4 = 7$$

The same... different...

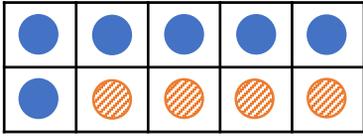


$$\square + \square = \square$$



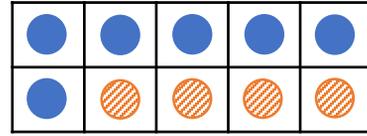
$$\square + \square = \square$$

I know... so...



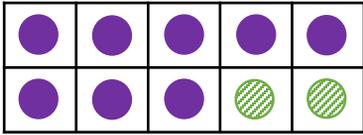
$$6 + 4 = 10$$

$$7 + 4 = \square$$



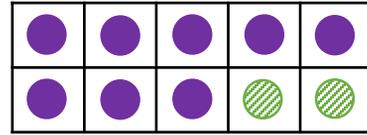
$$6 + 4 = 10$$

$$6 + 3 = \square$$



$$8 + 2 = 10$$

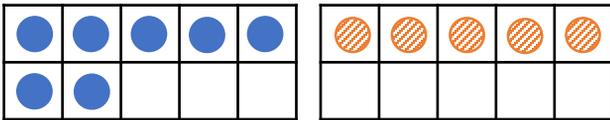
$$8 + 4 = \square$$



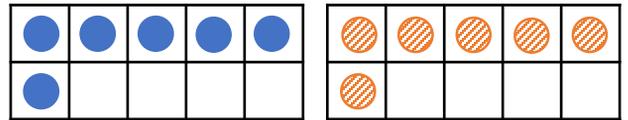
$$8 + 2 = 10$$

$$8 + \square = \square$$

The same... different...

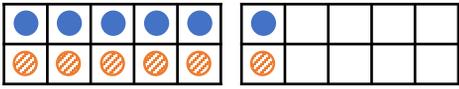


$$\square + \square = \square$$



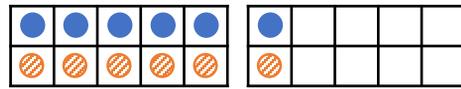
$$\square + \square = \square$$

I know... so...



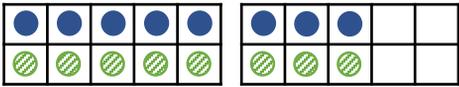
$$6 + 6 = 12$$

$$7 + 6 = \square$$



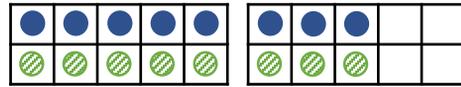
$$6 + 6 = 12$$

$$6 + 5 = \square$$



$$8 + 8 = 16$$

$$8 + 6 = \square$$

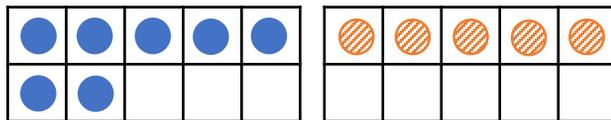


$$8 + 8 = 16$$

$$\square + 8 = 17$$

Different ways

$$7 + 5 = \square$$



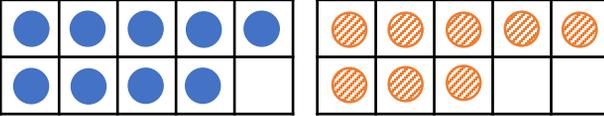
***7 + 5 is the same as:***

$$5 + 5 + \square$$

$$7 + 3 + \square$$

$$6 + \square$$

# Different ways

$9 + 8 = \square$ 


***9 + 8 is the same as:***

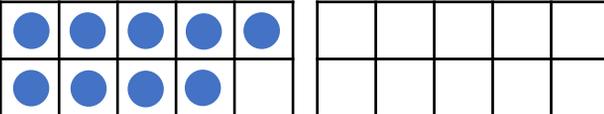
10 + 10 take away  $\square$

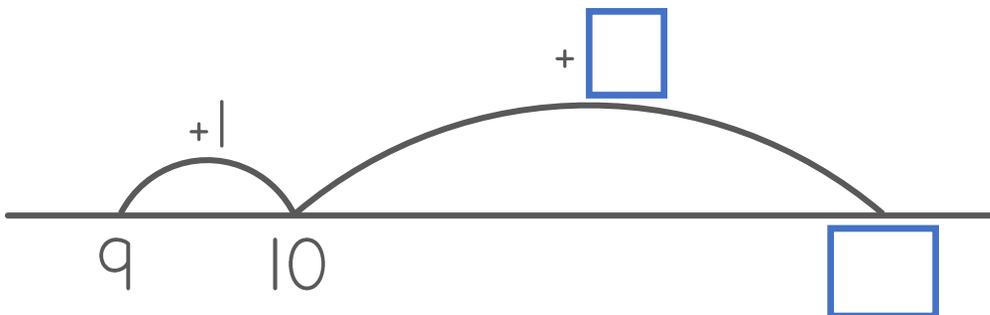
Double  $\square$  add 1

Double  $\square$  take away 1

Other: \_\_\_\_\_

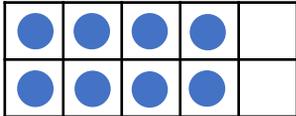
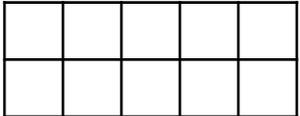
# Finish the picture

$9 + 5 = \square$ 


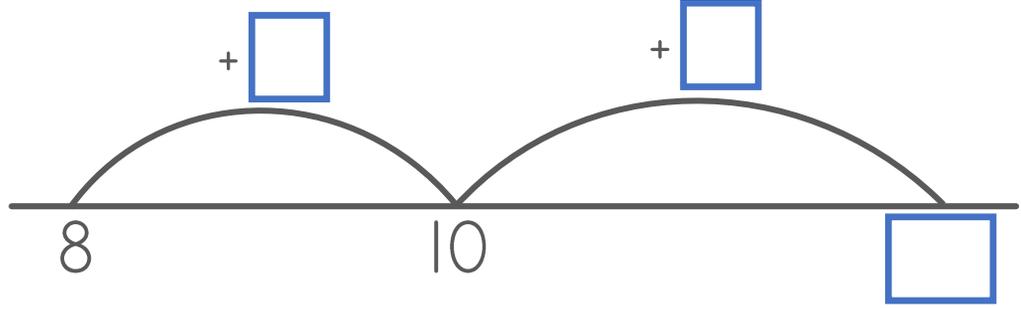


# Finish the pictures

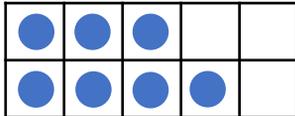
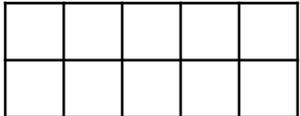
$8 + 5 = \square$

$+ \square$                        $+ \square$



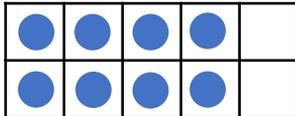
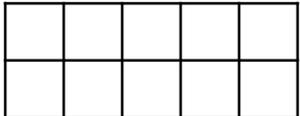
$7 + 5 = \square$

\_\_\_\_\_

7                                      10

$8 + 6 = \square$

\_\_\_\_\_

# Finish the pictures

# The same... different...

True or false?

$$4 = 4$$

$$4 = 3 + 1$$

$$2 + 2 = 4 + 1$$

True or false?

$$5 + 3 = 8 + 1$$

$$8 = 5 + 3$$

$$5 + 3 = 3 + 5$$

Which answer?

$$3 + 2 = \square + 1$$

5

6

4

# Fill the gaps

start                      add                      end

start                      add                      end

start                      add                      end

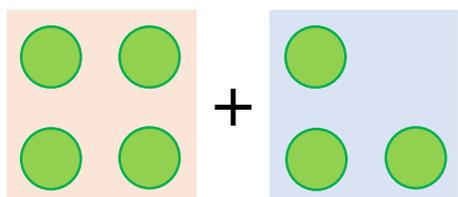
## Which answer?

$$88 + \square = 100$$

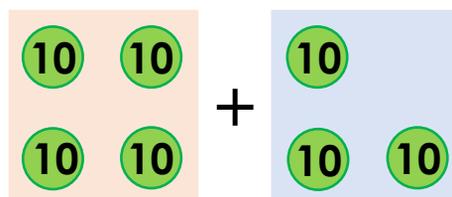
12

22

The same... different...



$$\square + \square = \square$$



$$\square + \square = \square$$

Which answer?

$$6 + 3 = 9 \text{ so } 60 + 30 = \square$$

90

630

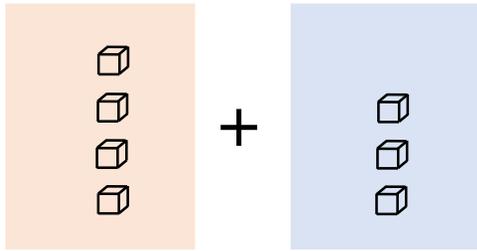
Odd one out

$$6 + 4$$

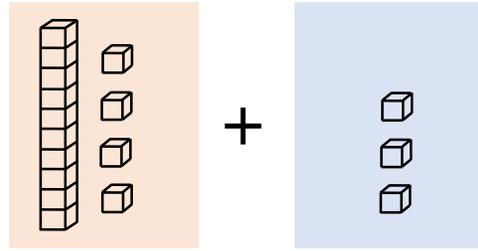
$$16 + 4$$

$$60 + 40$$

# The same... different...

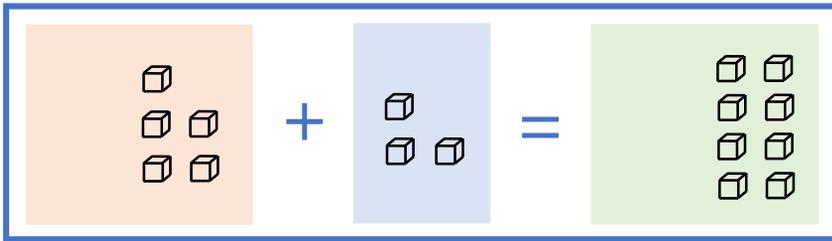


$$\square + \square = \square$$

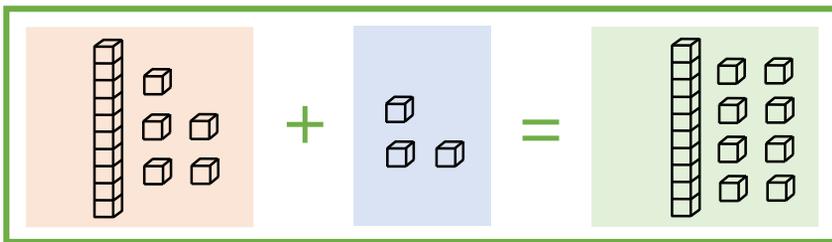


$$\square + \square = \square$$

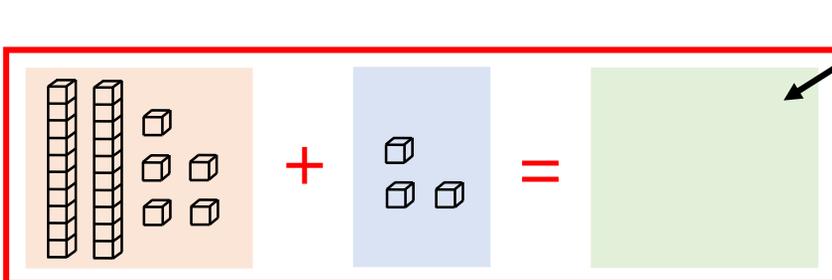
# I know... so...



$$5 + 3 = \square$$

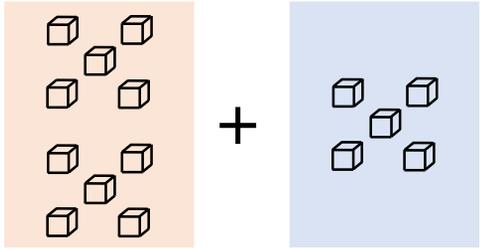


$$15 + 3 = \square$$

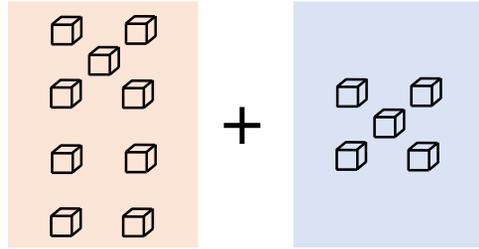


$$25 + 3 = \square$$

# Spot the difference



+

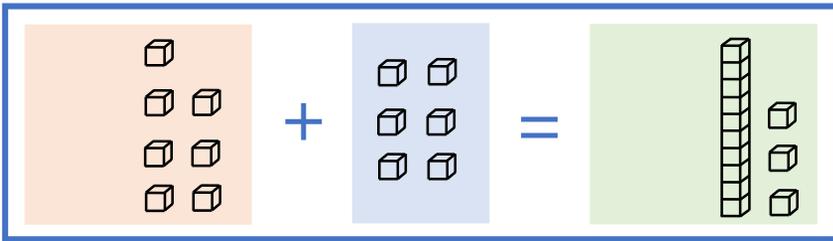


+

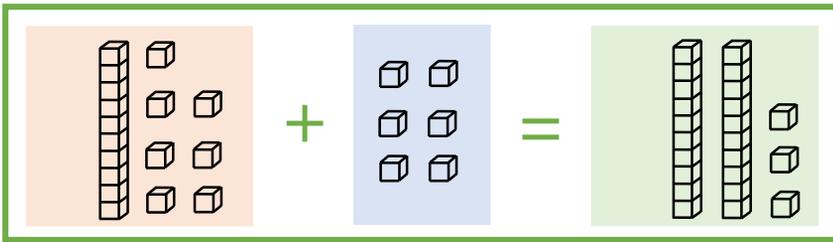
$$\square + \square = \square$$

$$\square + \square = \square$$

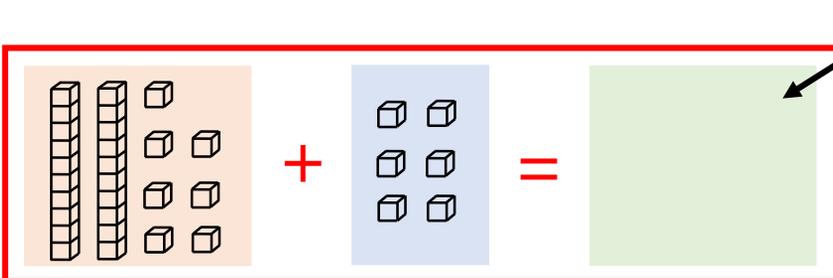
I know... so...



$$7 + 6 = \square$$



$$17 + 6 = \square$$

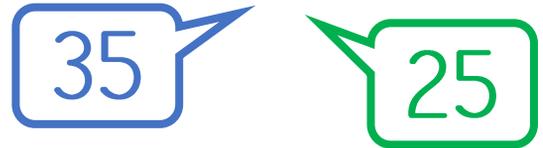


$$27 + 6 = \square$$

# Which answer?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75					

$$75 + \square = 100$$



# Missing number

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64						

$$64 + \square = 100$$

I know... so...

$$36 + 20 = 56$$

$$36 + 23 = \square$$

$$36 + 20 = 56$$

$$36 + \square = 55$$

$$43 + 30 = 73$$

$$43 + 29 = \square$$

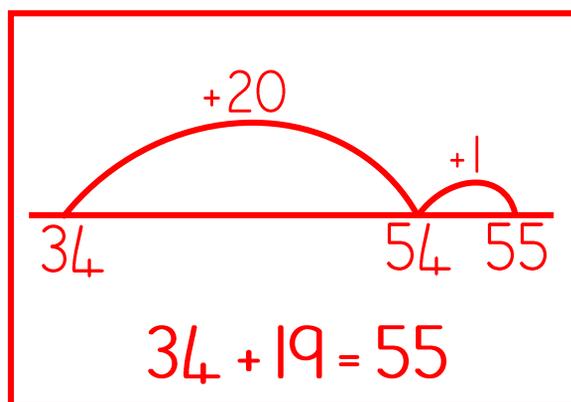
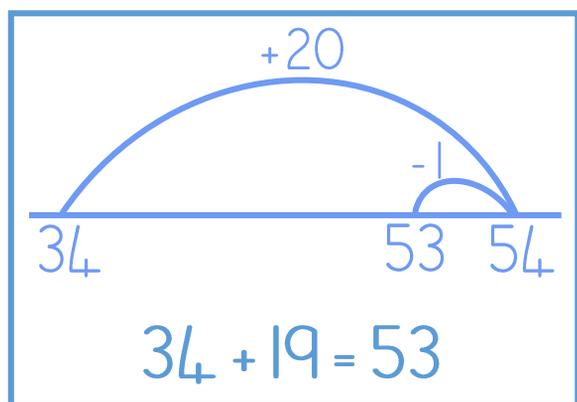
$$43 + 30 = 73$$

$$43 + \square = 75$$

Which answer?

✓ ✗

$$34 + 19$$



## Which is harder?

Circle the harder question in each pair.

$16 + 7 \quad \text{OR} \quad 16 + 12$

$20 + 12 \quad \text{OR} \quad 19 + 12$

$70 + 14 \quad \text{OR} \quad 70 + 41$

## Change the order

Which numbers do you add first?

$9 + 6 + 4 = \square$

Add  $\square + \square$  first

$7 + 6 + 3 = \square$

Add  $\square + \square$  first

$4 + 8 + 2 + 6 = \square$

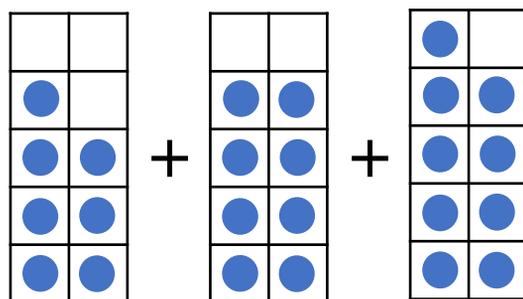
Add  $\square + \square$  first

$8 + 5 + 3 = \square$

Add  $\square + \square$  first

## Different ways

$$7 + 8 + 9 = \square$$



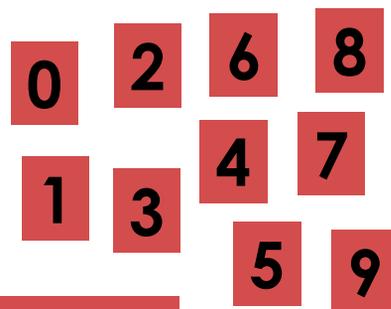
Add  $\square + \square$   
then add  $\square$

30 take  
away  $\square$

3 lots  
of  $\square$

## Digit cards game

You need digit cards 0 to 9



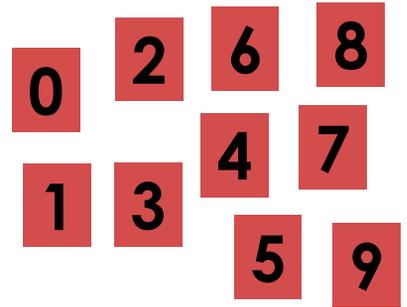
$$\square + \square = \square \square$$



The answer is in the 5 times table.

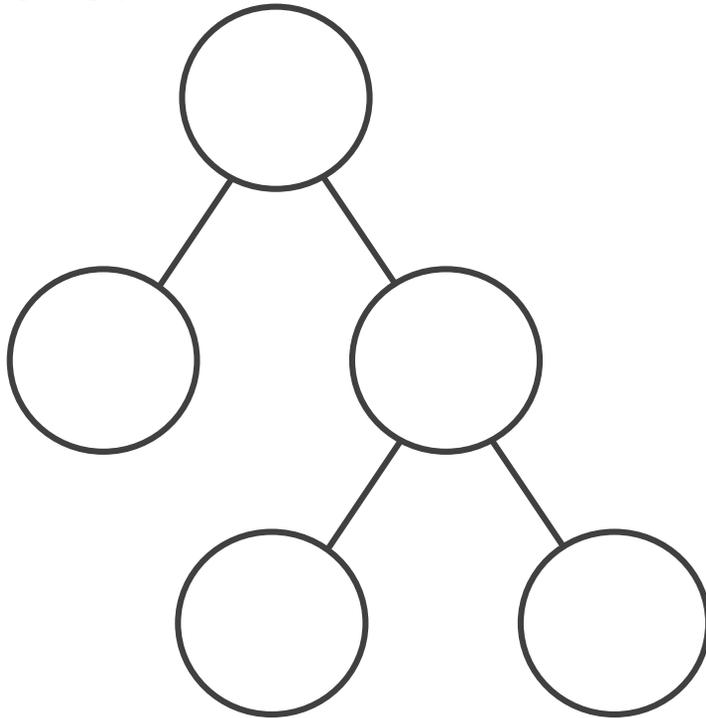
**Do in different ways.**

# Digit cards game



You need digit cards 0 to 9

The two numbers in the circles below add to make the number in the circle above.

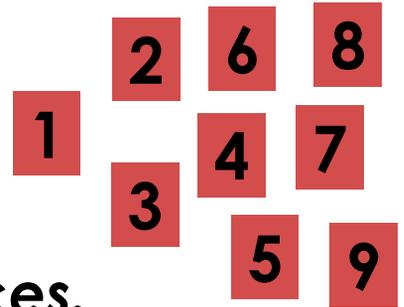


**Do in different ways.**

*What is the smallest number that can go in the top circle?*

# Digit cards game

You need digit cards 1 to 9  
Use each digit once.



**Complete the number sentences.**

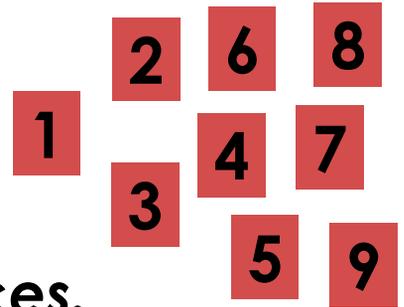
$$\square = \square + \square$$

$$\square + \square = \square$$

$$\square + \square > \square$$

# Digit cards game

You need digit cards 1 to 9  
Use each digit once.



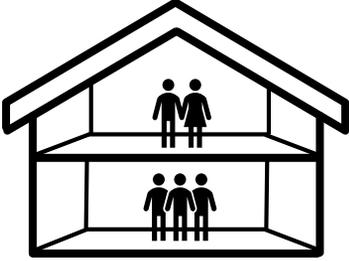
**Complete the number sentences.**

$$\square + \square < \square$$

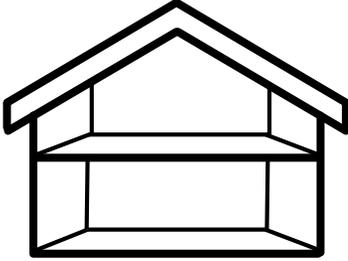
$$\square = \square + \square$$

$$\square < \square + \square$$

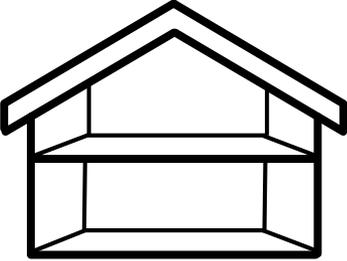
# Finish the pictures



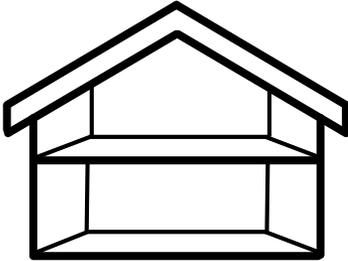
people upstairs  
 people downstairs  
 people in total



people upstairs  
 people downstairs  
 people in total



people upstairs  
 people downstairs  
 people in total



people upstairs  
 people downstairs  
 people in total

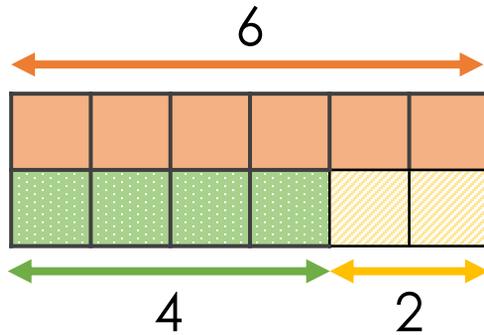
True or false? ✓ ✗

$$4 + 2 = 6$$

$$6 - 2 = 4$$

$$4 = 2 + 6$$

$$4 - 6 = 2$$



$$6 - 2 = 4$$

$$6 = 4 + 2$$

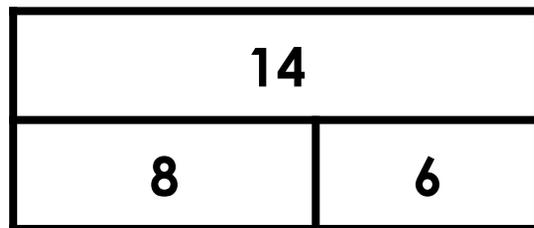
True or false? ✓ ✗

$$8 + 6 = 14$$

$$8 - 6 = 14$$

$$14 = 8 + 6$$

$$8 = 14 - 6$$



$$14 - 6 = 8$$

$$8 = 6 + 14$$

## Which number sentence?

2 boys and 3 girls. How many children?

**Which number sentence:**

$$2 + \square = 3 \longleftarrow \text{OR} \longrightarrow 2 + 3 = \square$$

6 children. 4 girls. How many boys?

**Which number sentence:**

$$4 + \square = 6 \longleftarrow \text{OR} \longrightarrow 6 + 4 = \square$$

5 children. 1 boy. How many girls?

**Which two number sentences:**

$$5 = 1 + \square \quad 5 + 1 = \square \quad 5 - 1 = \square$$

4 girls. 7 children. How many boys?

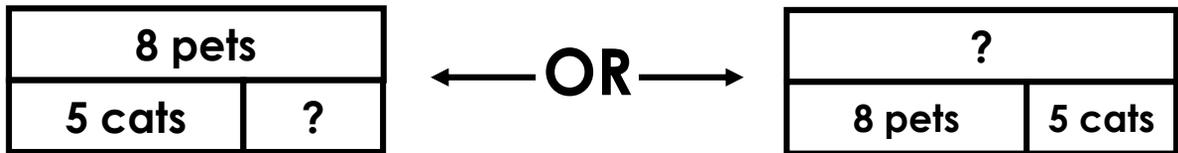
**Which two number sentences:**

$$7 + 4 = \square \quad 7 - 4 = \square \quad 7 = 4 + \square$$

## Which picture?

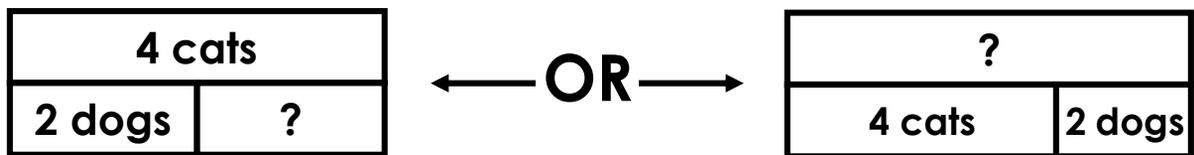
8 pets. 5 cats. How many dogs?

**Which bar model:**



2 dogs. 4 cats. How many pets?

**Which bar model:**



## Odd one out

$5 + \square = 9$

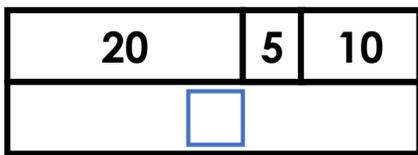
$5 + 9 = \square$

$9 - 5 = \square$

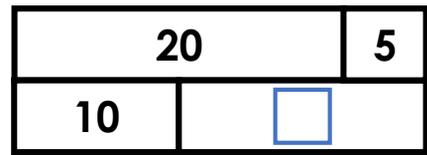
Which picture?

$$20 + 5 = 10 + \square$$

Which bar model:



← OR →



Which answer?

$$5 + 3 = \square - 2$$

10

6

8

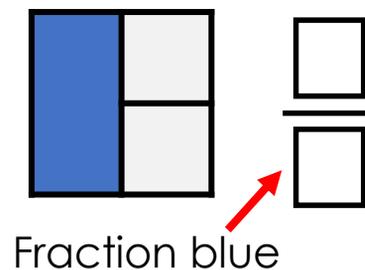
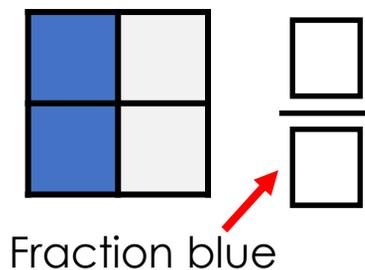
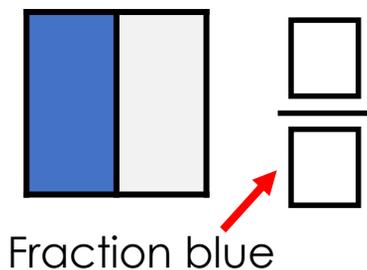
Different ways

Fill the gaps. Do in different ways.

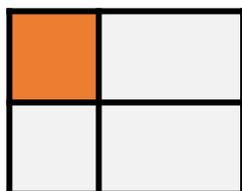
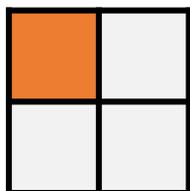
$$5 + \square = 10 - \square$$

How many ways can it be done?

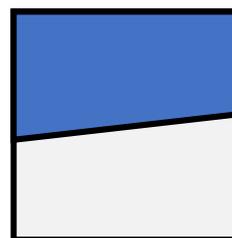
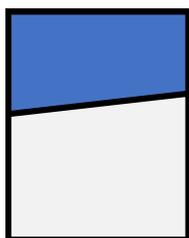
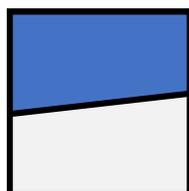
# Spot the difference



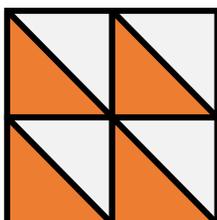
## The same... different...



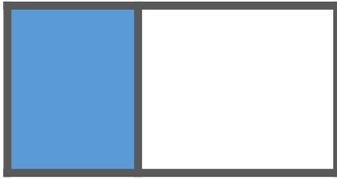
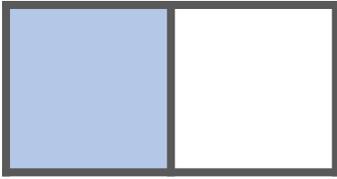
## Odd one out



## The same... different...



# Odd one out

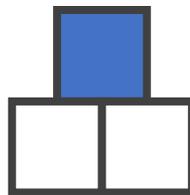


**Challenge: think of a reason for each shape.**

# True or false?

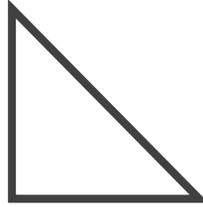
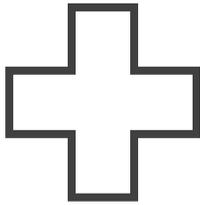
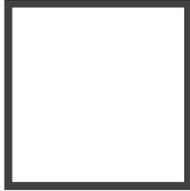
✓ x

Is it  $\frac{1}{2}$  blue?



Draw

Colour  $\frac{1}{2}$  of each shape:



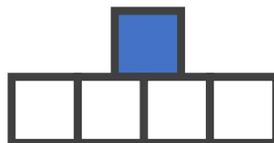
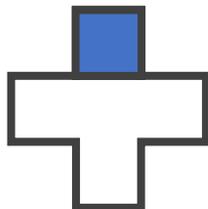
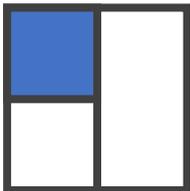
Spot the difference



True or false?

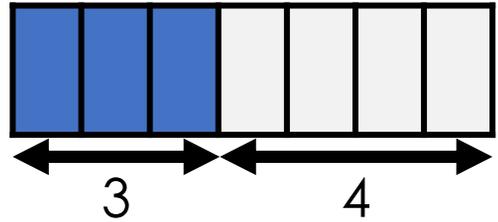
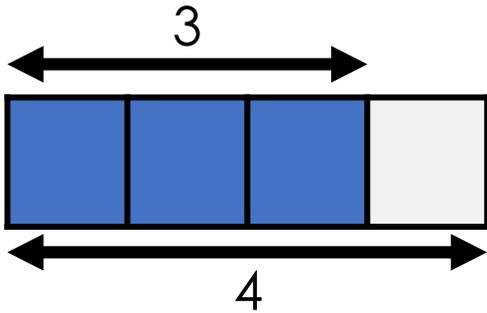
✓ x

Is it  $\frac{1}{4}$  blue?



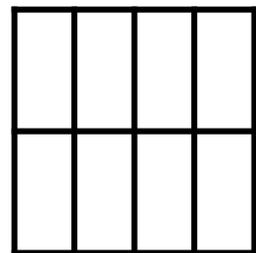
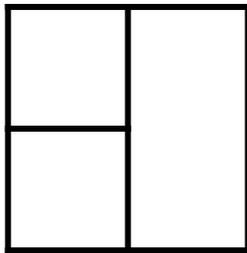
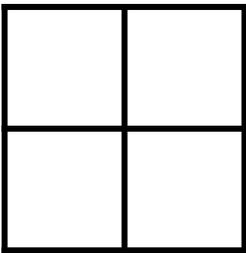
Which picture?

Which picture is  $\frac{3}{4}$  blue?



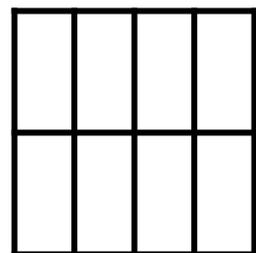
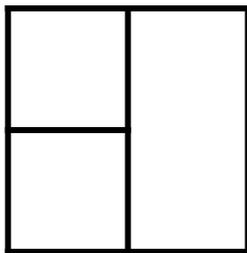
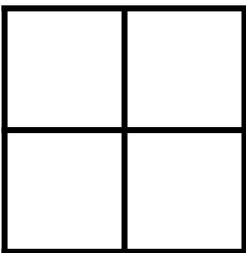
Draw

Shade  $\frac{1}{4}$  of each shape.



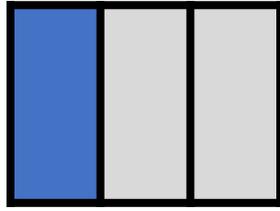
Draw

Shade  $\frac{3}{4}$  of each shape.



# Which answer?

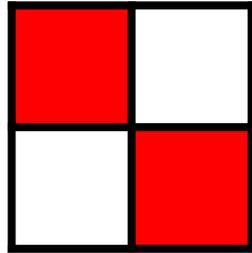
Is it  $\frac{1}{2}$  blue?



Yes. 1 blue and 2 grey.

No. There are 3 parts.

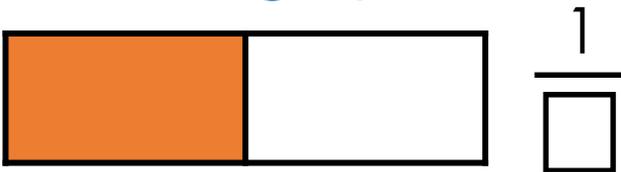
Is it  $\frac{1}{2}$  red?



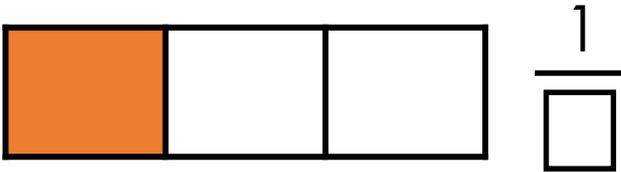
Yes. Same red/white.

No. There are 4 parts.

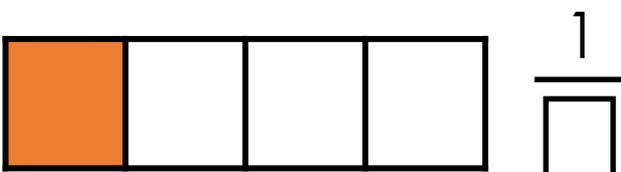
# Fill the gaps



$$\frac{1}{\square}$$



$$\frac{1}{\square}$$

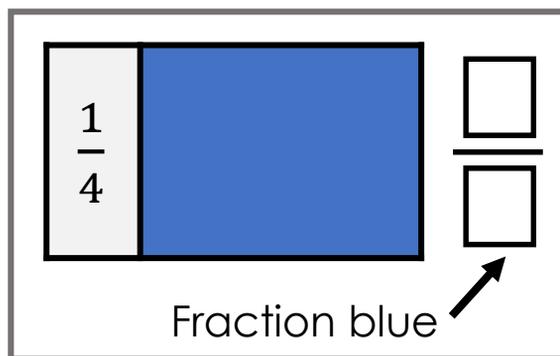
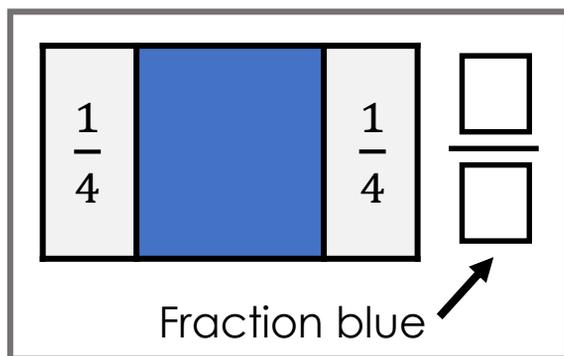


$$\frac{1}{\square}$$

What do you notice?

# Read the pictures

**What fraction is blue?**



**Draw**      **Mark  $\frac{1}{2}$  way on each line.**



What do you notice?

**Draw**      **Mark  $\frac{1}{4}$  way along each line.**



What do you notice?

## Fill the gaps

The **class** is part of the .

The  is part of the **zoo**.

Your **nose** is part of your .

The  is part of the **family**.

**Cheese** is part of the .

Your  are part of your **feet**.

### Words:

pizza

lion

baby

school

toes

face

## Fill the gaps

Use each word **twice**: **Words:** hand, finger, arm

Your **nail** is part of your .

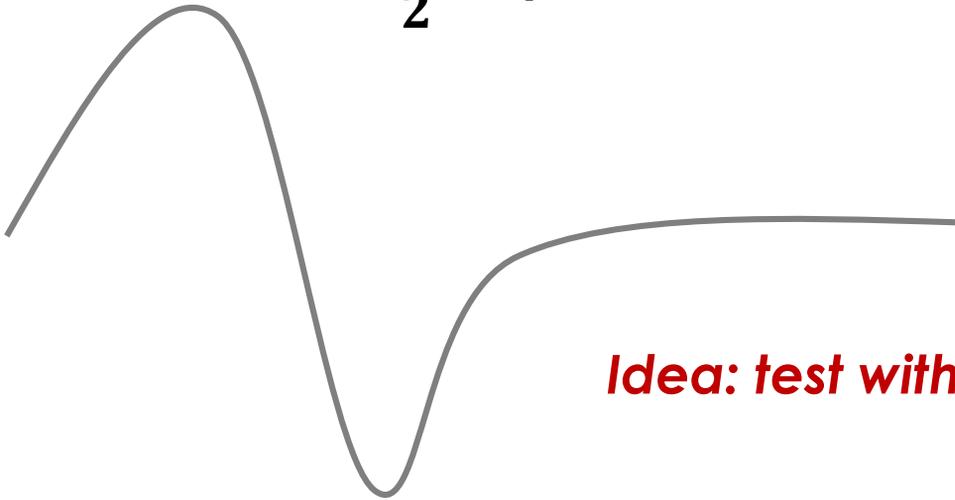
Your  is part of your .

Your  is part of your .

Your  is part of your **body**.

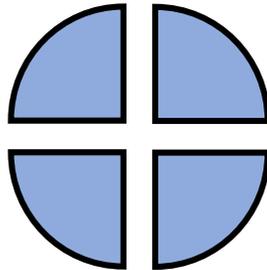
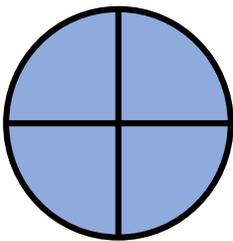
Draw

Mark  $\frac{1}{2}$  way on the line.

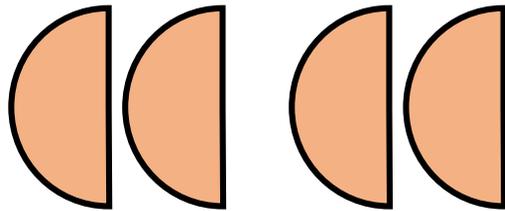
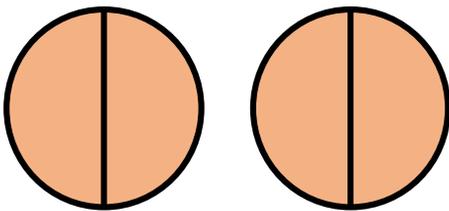


*Idea: test with string*

The same... different...

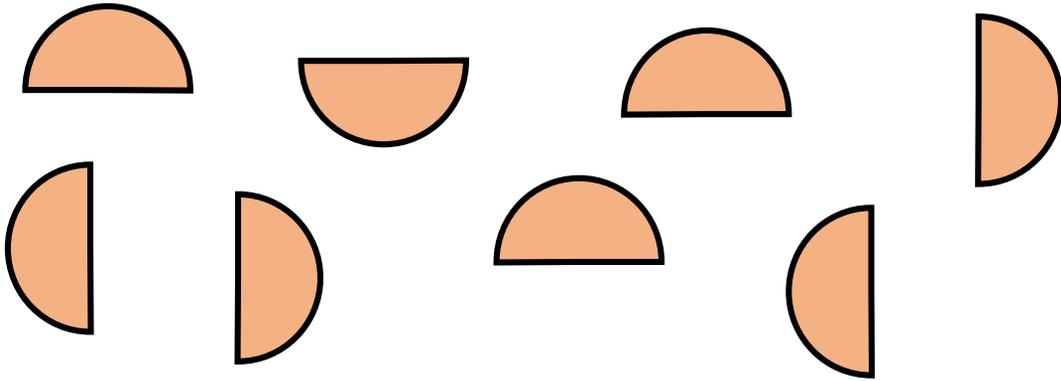


The same... different...



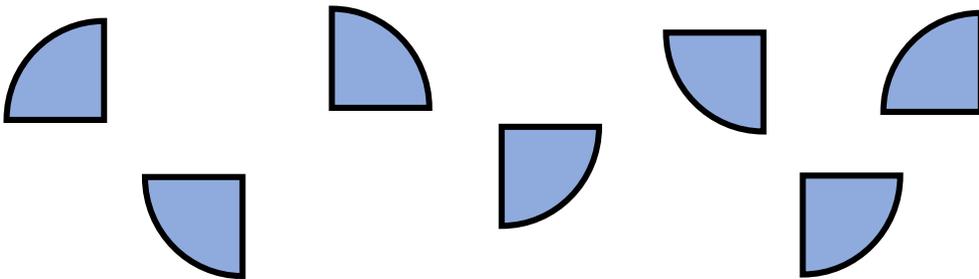
## Explain

*How many halves make 3 circles?*



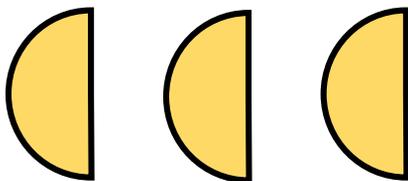
## Explain

*How many quarters make one circle?*



## Which answer?

*How many circles?*





$$1\frac{1}{2}$$



$$3$$

# Spot the patterns

Fill the gaps:

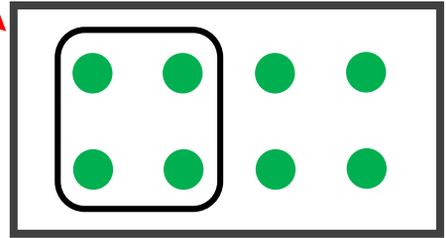
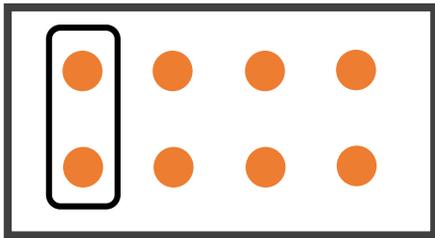
$$0, \frac{1}{2}, \square, 1\frac{1}{2}, 2, \square$$

$$\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, \square$$

$$0, \square, \frac{1}{2}, \square, 1$$

## Which picture?

Which picture shows  $\frac{1}{4}$  of 8?



## Read the picture



This is half of the team.

players in the team.

# Fill the gaps

8	
?	


  
 $\frac{1}{2}$  of 8 =

8			
?			


  
 $\frac{1}{4}$  of 8 =

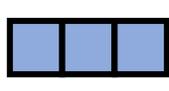
?	
8	

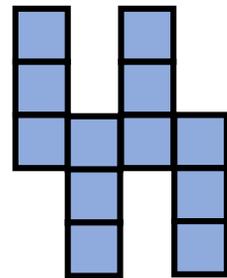
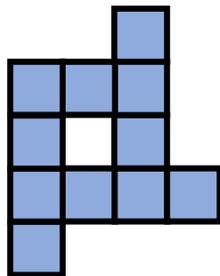
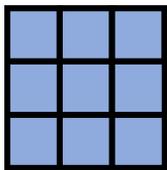

  
8 is  $\frac{1}{2}$  of

?			
8			

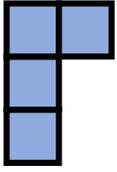

  
8 is  $\frac{1}{4}$  of

# Read the pictures


**This is  $\frac{1}{4}$  of which shape?**     Circle.

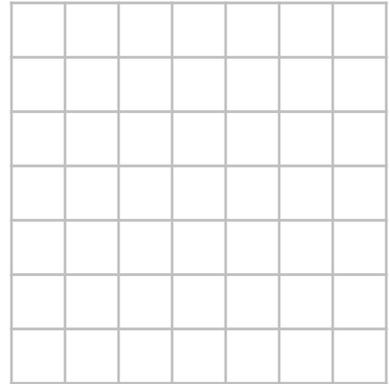


## Draw

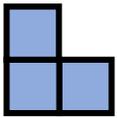


This is  $\frac{1}{4}$  of a square.

**Draw the square.**

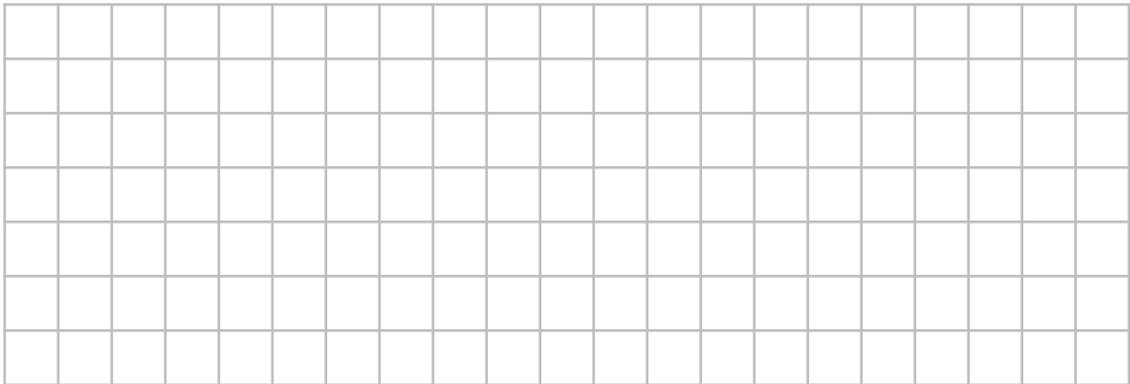


## Different ways

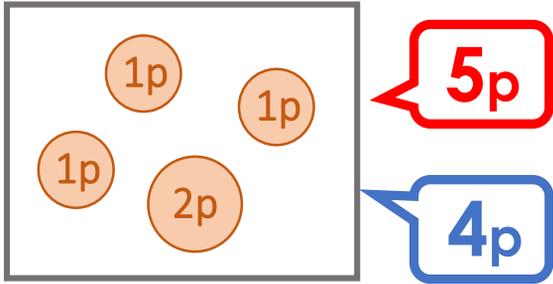


This is  $\frac{1}{4}$  of a rectangle.

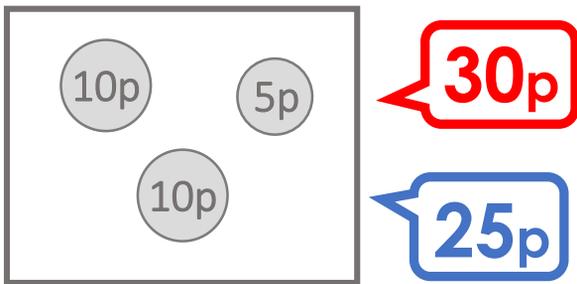
**Draw the rectangle. Do in two ways.**



Which answer?

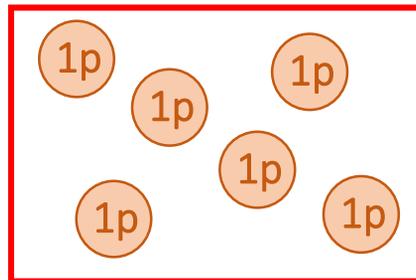
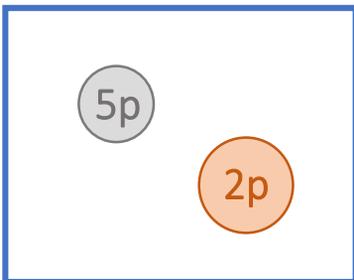


Which answer?



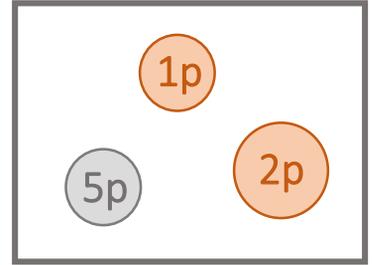
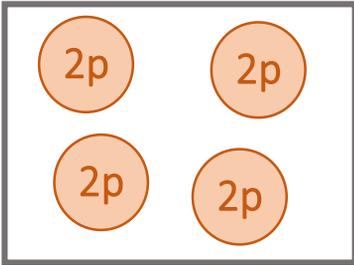
Read the picture

***Which is more money?***



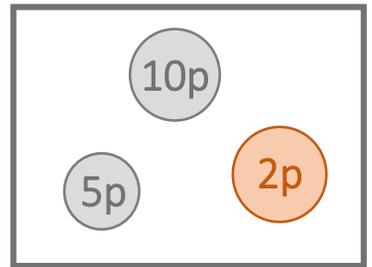
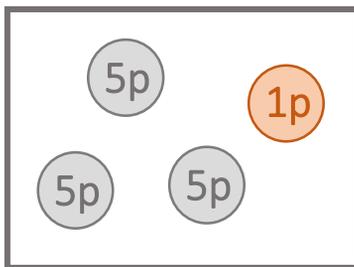
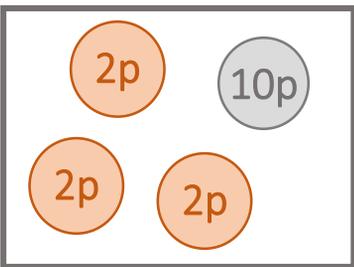
Is it 7p?

✓ x



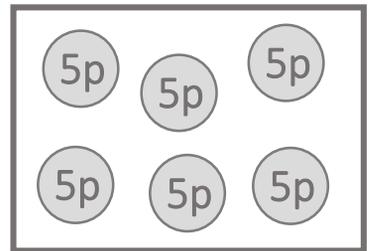
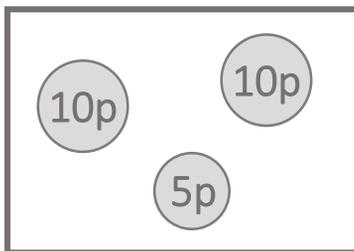
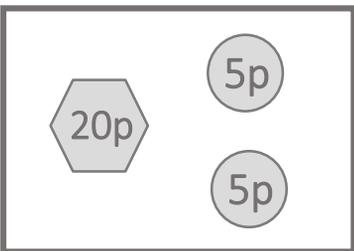
Is it 16p?

✓ x



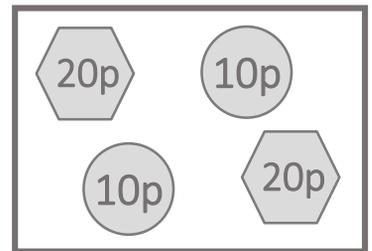
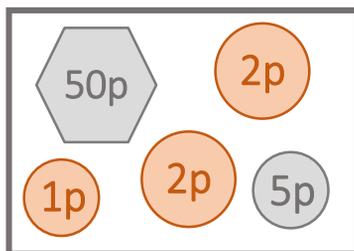
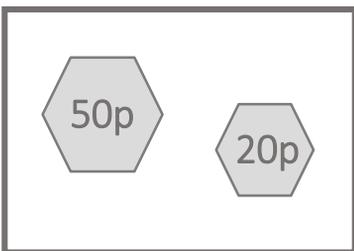
Is it 30p?

✓ x



Is it 60p?

✓ x



Agree or disagree? ✓ x

Can you make 6p with two coins?

Yes: 3p plus 3p is 6p

Agree or disagree? ✓ x

Can you make 8p with two coins?

Yes: 4p plus 4p is 8p

I can buy...

You have these coins.



Circle each toy that you can buy.



35p



38p



30p



28p

# Two ways

Make each amount in two ways.

You can use each coin more than once.



5p	5p
----	----

6p	6p
----	----

11p	11p
-----	-----

30p	30p
-----	-----

# Two ways

3 coins add to make 12p

10p		
-----	--	--

5p		
----	--	--

## Fill the gaps

	price	pay with...	change
	3p	 	

	price	pay with...	change
	6p		

	price	pay with...	change
	3p		

## Explain the mistakes

	price	pay with...	change
	3p		

	price	pay with...	change
	6p		

# Fill the gaps

	price	pay with...	change
	35p	  	

	price	pay with...	change
	38p		 

	price	pay with...	change
			

# Explain the mistakes

	price	pay with...	change
	16p		

	price	pay with...	change
	28p	 	 

# Different ways

## Make 6p

2 coins

--	--

3 coins

--	--	--

4 coins

--	--	--	--

5 coins

--	--	--	--	--

# Different ways

## Make 20p

**2 coins**

--	--

**3 coins**

--	--	--

**4 coins**

--	--	--	--

**5 coins**

--	--	--	--	--

## How many ways?

**Make 60p**

**Use 5 coins**

--	--	--	--	--

## Fill the gaps

I brush my teeth  I eat my breakfast.

I get dressed  I wake up.

I do maths  my lunch.

## Which measure?

**Eat lunch**  
minutes **OR** hours

**Do 10 jumps**  
seconds **OR** minutes

**Sleep at night**  
minutes **OR** hours

**Brush teeth**  
seconds **OR** minutes

## Which answer?

How many hours in a day?

24

12

## Which answer?

How many minutes in an hour?

100

60

True or false?      ✓ ✗

1 **minute** is the same as **60 seconds**.

1 **day** is the same as **60 hours**.

1 **month** is the same as **7 days**.

1 **week** is the same as **7 days**.

## Fill the gaps

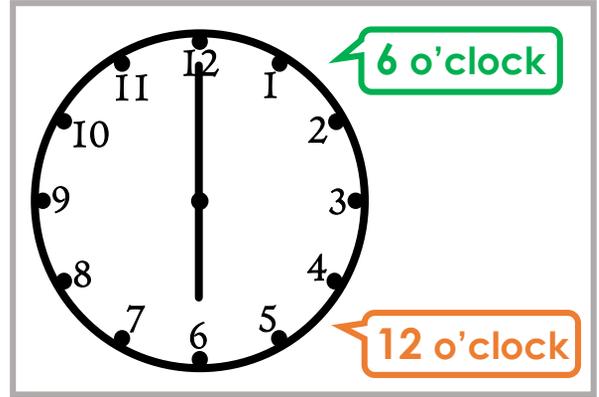
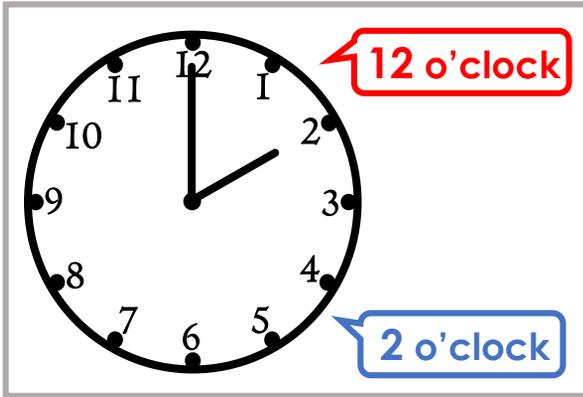
Use a  $<$ ,  $=$  or  $>$  sign in each blue box.

1 minute  100 seconds

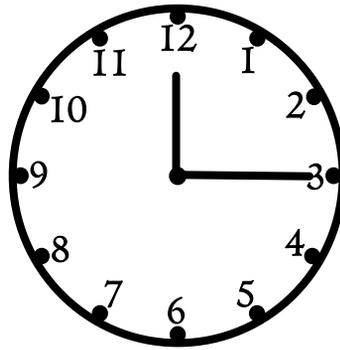
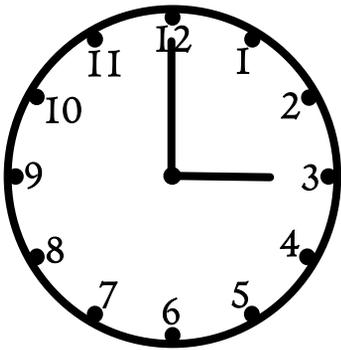
1 day  60 hours

1 second  60 minutes

# Which answer?

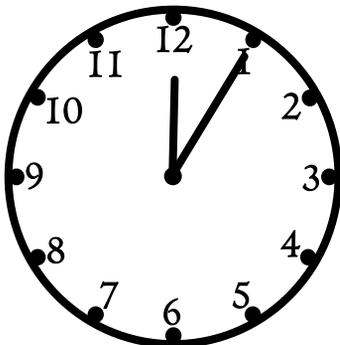


# Spot the difference



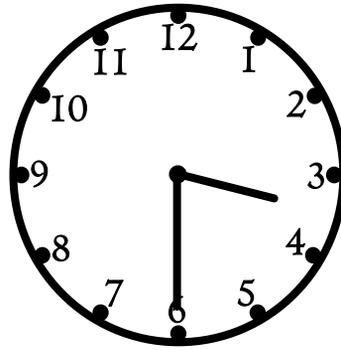
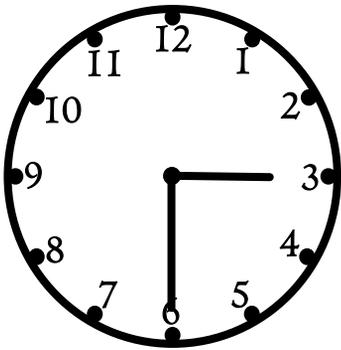
Which shows  
3 o'clock?

# Explain the mistake



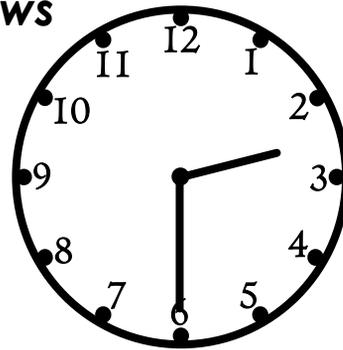
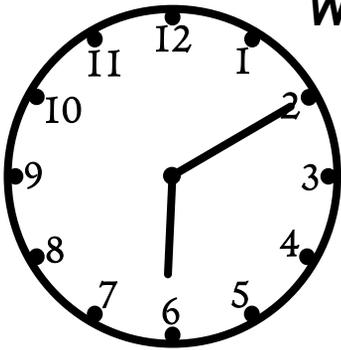
The time is  
1 o'clock

# Spot the difference

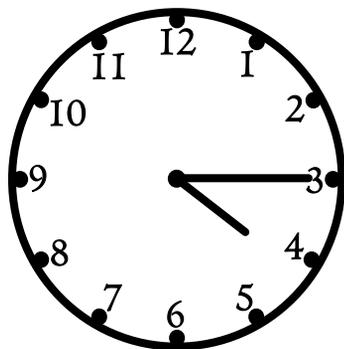


## Which clock?

Which clock shows  
half past two?



## True or false?    ✓    ✗



Quarter past four

4:15

# Which answer?

# Which answer?

Circle the correct time.

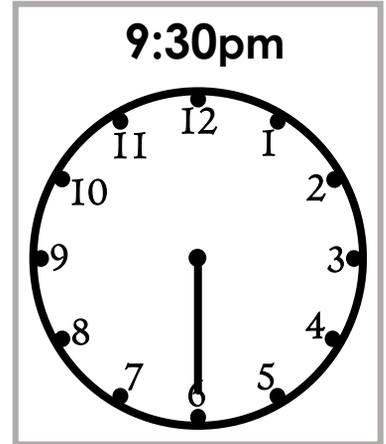
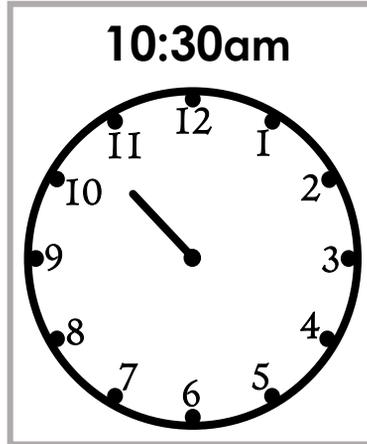
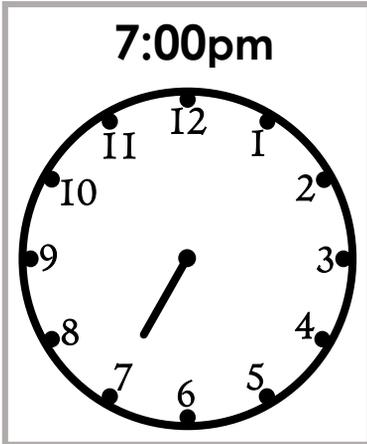
2:20  
OR  
4:02  
OR  
4:10

5:05  
OR  
5:01  
OR  
1:25

# Explain the mistakes

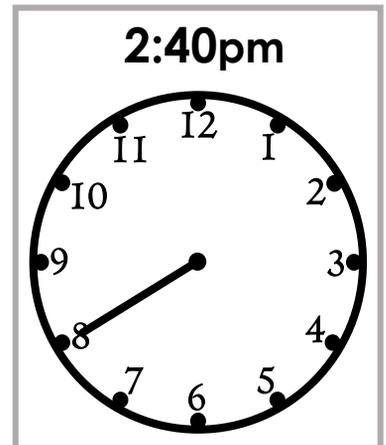
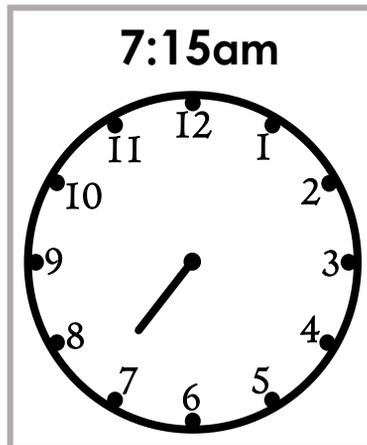
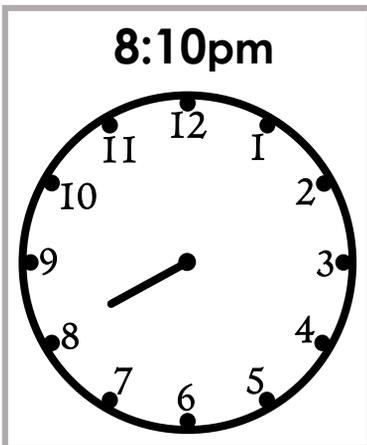
# Missing hand

Draw the missing hand on each clock.



# Missing hand

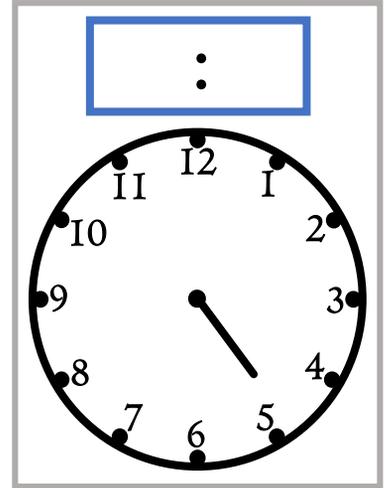
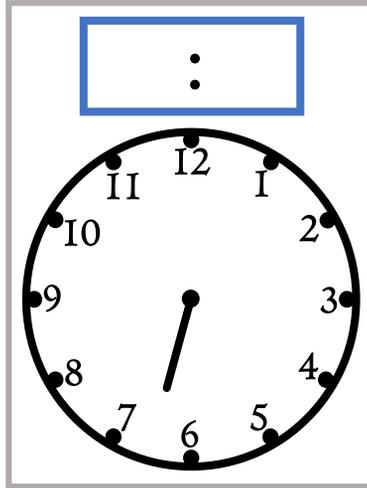
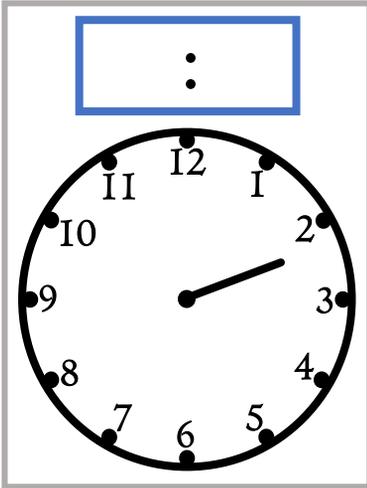
Draw the missing hand on each clock.



# Estimate

The minute hand is missing on each clock.

**Estimate the times.**



# I SEE REASONING – KS1

## Answers

### Number and place value

**Read the picture (p14 q2):** 2 dominoes with 4 dots; 3 dominoes with 3 dots

**Read the picture (p15 q2):** 3 dominoes with 8 dots; 2 dominoes with 9 dots

**Read the picture (p16 q1):** 2 dominoes with more than 7 dots; 3 dominoes with less than 5 dots

**Missing numbers (p22&p23):** 38 and 74. Note that these two tasks are identical except the question on p23 includes the squares.

**Different ways (p27 q1):** Four ways (3 tens & 2 ones; 2 tens & 12 ones; 1 ten & 22 ones; 32 ones)

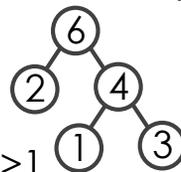
**How many ways? (p27 q2):** Three ways (2x10p & 4x1p; 10p & 14x1p; 24x1p)

**Investigate (p27 q3):** 13 and 8 gives the smallest difference

### Addition

**Digit cards game (p44 q2):** Possible solutions:  $6+4=10$ ,  $7+3=10$ ,  $8+2=10$ ,  $8+7=15$ ,  $9+6=15$  (also, would you allow the use of 05 in the answer box?)

**Digit cards game (p45):** The smallest number in top circle is 6



**Digit cards game (p46):** Example solution:  $8=6+2$   $3+4=7$   $5+9>1$

**Missing numbers (p47):** Example solution:  $1+6<9$   $7=4+3$   $2<5+8$

### Subtraction

**Digit cards game (p61 q2):** Possible solutions:  $23-9=14$ ,  $23-4=19$ ,  $41-9=32$ ,  $41-2=39$

**Digit cards game (p62):** Example solution:  $10-8=2$   $5-4=1$

### Addition and subtraction

**Different ways (p67 q3):** Six ways ( $5+0=10-5$ ,  $5+1=10-4$ ,  $5+2=10-3$ ,  $5+3=10-2$ ,  $5+4=10-1$ ,  $5+5=10-0$ )

# I SEE REASONING – KS1

## Answers

### Multiplication

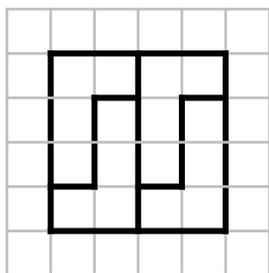
**Digit cards game (p82 q2):** Three ways, or using commutative facts six ways ( $2 \times 5 = 10$ ,  $3 \times 4 = 12$ ,  $4 \times 5 = 20$ )

### Multiplication and division

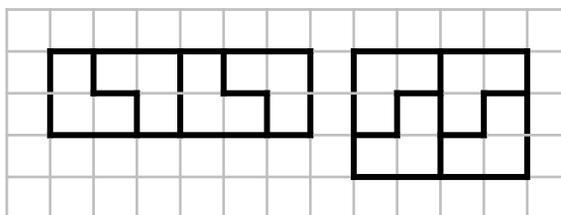
**Read the pictures (p88 q2):** 1st picture 2 dice hiding; 2<sup>nd</sup> picture 3 dice hiding; 3<sup>rd</sup> picture 6 dice hiding.

### Fractions

**Draw (p100 q1):**



**Draw (p100 q2):**



### Measurement

**Predict and measure (p105 q1):** All the lines are 5cm. The grey lines create an optical illusion making the lines appear shorter/longer.

**I know... so... (p105 q2):** 21 cubes.

**Explain (p106 q2):** 6 yellow blocks.

### Measurement - money

**Different ways (p113):**  $5p + 1p$   $3 \times 2p$   $2p + 2p + 1p + 1p$   $4 \times 1p + 2p$

**Different ways (p114 q1):**  $2 \times 10p$   $10p + 5p + 5p$   $4 \times 5p$   $10p + 5p + 2p + 2p + 1p$

**How many ways? (p114 q2):** 3 ways ( $50p + 5p + 2p + 2p + 1p$ ;  $4 \times 10p + 20p$ ;  $20p + 20p + 10p + 5p + 5p$ )

### Measurement - time

**Missing hand (p120 q1&2):** Note that the third hand is the minute hand.