

Name:

Date:

Christmas Maths Challenge

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	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

Santa Clause, Rudolf, the fairies and the elves are all busy preparing for the big night!

They have had lots of jobs to do and problems to solve.

Can you help them out by solving these Christmas maths problems for them?

Practice question

Rudolf cannot work out the answers to these addition problems.

Can you help?

Write the total.



$$33 + 14 =$$

1. Write the total

$$600 + 30 + 6 =$$

2. One of these numbers does not belong in this set. Can you help Rudolf to find it?

?



Cross out the number that does not belong.

even numbers
16
19
26
48
12
22
36

3. Some of Santa's elves share 16 mince pies.

They get 4 each.



How many elves are there?

elves

Use this space if you need to draw any pictures or write anything down.

4. Rudolf wants to buy Santa a Christmas pudding.



He gives the shopkeeper 55p

The shopkeeper says,

‘You need 35p more to buy the Christmas pudding’.

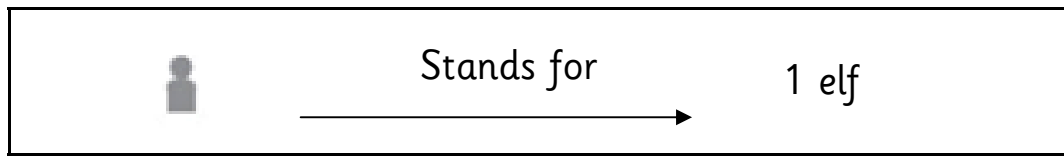
How much does the Christmas pudding cost?




p

Use this space if you need to draw any pictures or write anything down.

Santa's elves like to go to different clubs.

This table shows the club they are in.



club	number of elves
bell ringing	
ice skating	
carol singing	

5. How many more elves go to ice skating than carol singing?

This graph should show the same data as the table.

Shade in the correct number of blocks for carol singing club.



The Christmas fairies cut a ribbon into two pieces,

9cm and **8cm**



6. How long was the ribbon before they cut it?

 cm







7. What is the difference in their lengths?

 cm

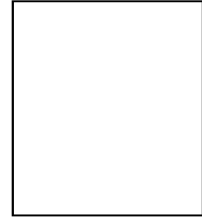
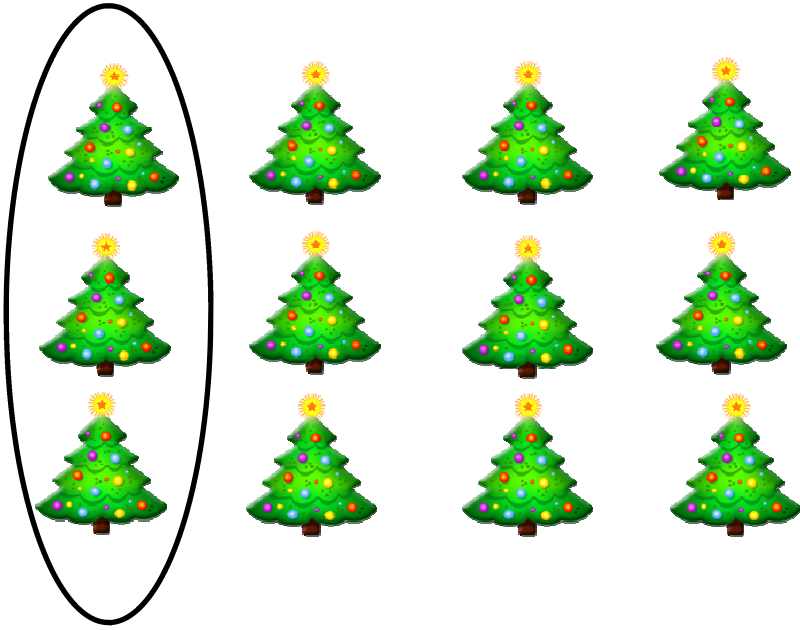
8. Write the missing number in the two empty candles.

is **10 less than**

—————→

 <input type="text" value="52"/>	→	 <input type="text" value="62"/>
 <input type="text"/>	→	 <input type="text" value="85"/>
 <input type="text" value="77"/>	→	 <input type="text"/>

9. What fraction of the set is ringed?



10. I am a date in December. Solve this riddle to find out which date.



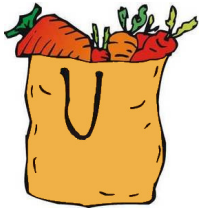
Double me
and subtract 4.
You get 44.

_____December

Use this space to work out your answer.

11. Rudolf needs to weigh each of the items below but he doesn't know which unit to use. Can you help him?

Write **kg** or **g** in the boxes below.



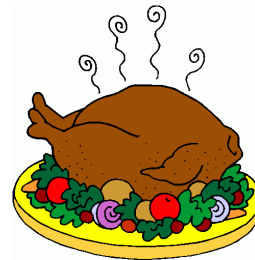
A sack of carrots



A Christmas bauble



A snowflake



A Christmas turkey

12. Write a word in each Christmas cracker.

faces

edges

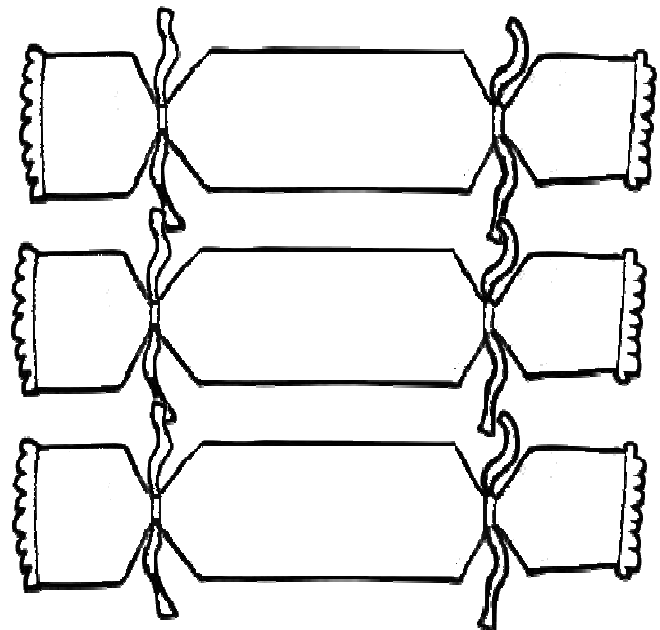
vertices

A cuboid has

6

8

12



13. Write numbers in the matching chimney pots.

15	18	16
10	13	12
11	19	14

Make 20

5	2	

14. The letter C has a line of symmetry.







Tick any other letters that have a line of symmetry.

~~C~~ H R I S T M A S

60 children visited Santa.

Santa let them choose one toy each.

The table below shows which toys the children chose.

toys chosen	number of children
doll's house 	15
rocking horse 	5
tricycle 	
toy car 	12
toy train 	9
jack in the box 	9
total	60

15. Complete the table.

16. Now look at each sentence below.

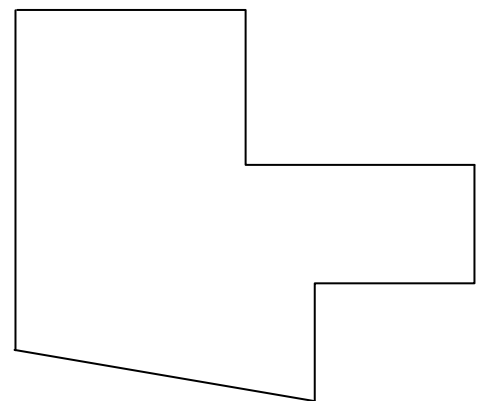
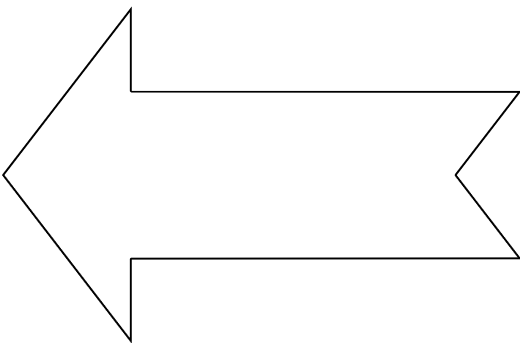
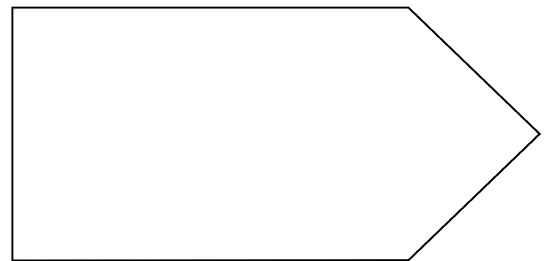
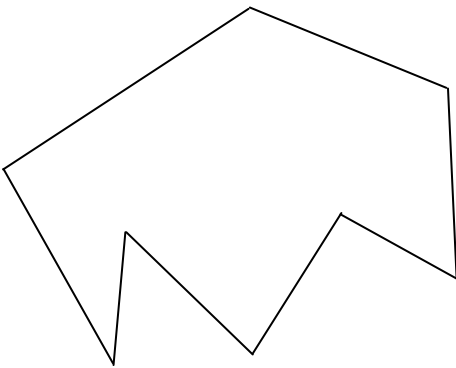
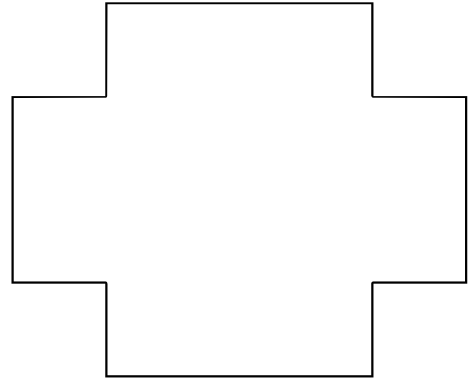
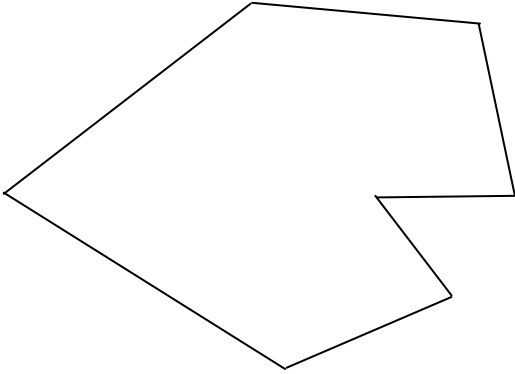
Put a tick (✓) if it is **true**.

Put a (x) if it is **not true**.

Nine more children chose the doll's house than the car.

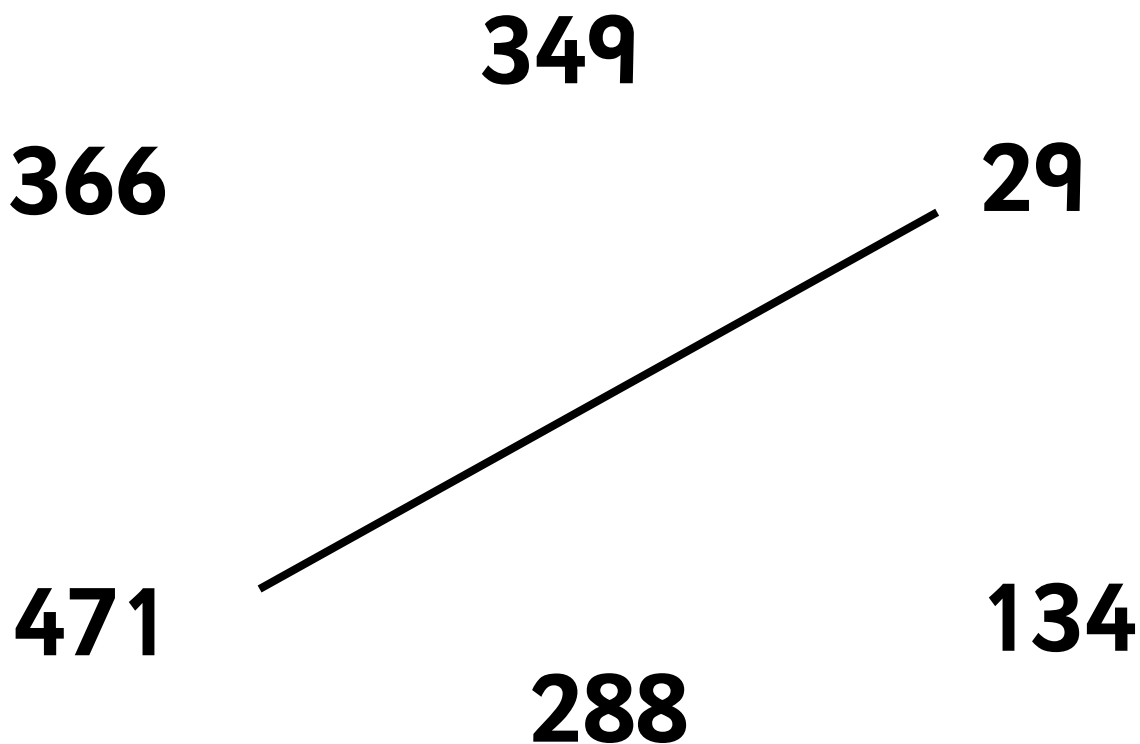
$\frac{1}{4}$ of the children chose the doll's house.

Santa has asked Rudolf to collect all the **octagons** from the shapes below.

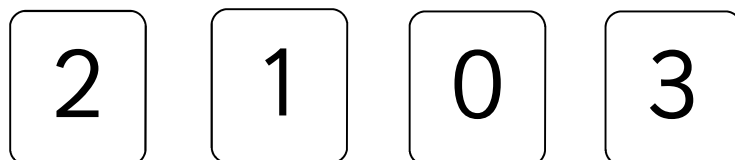


17. Put a tick (✓) on the shapes that are octagons to show Rudolf which shapes to collect.

18. Can you help the elf to join two other numbers which total 500?



Look at these digits.



19. The elf needs to use **all** the digits to make a number nearest to **100**. Can you help?

--	--	--	--

The fairies are trying to join the times on the times analogue clocks with the times on the digital clocks but they can't find a pen. Can you help?

