Problems of the Day 2020

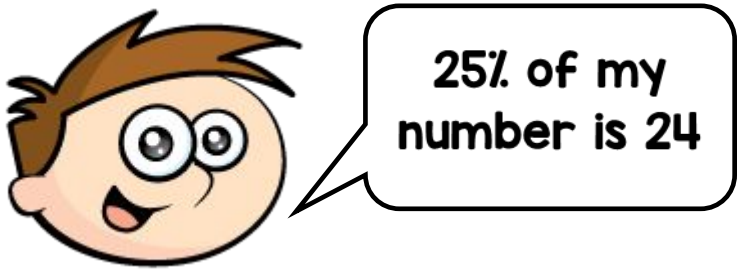
Day 1

1 Fill in the missing numbers.

100 less than 20,000 is [19,900]

[600] more than 20,000 is 20,600

2

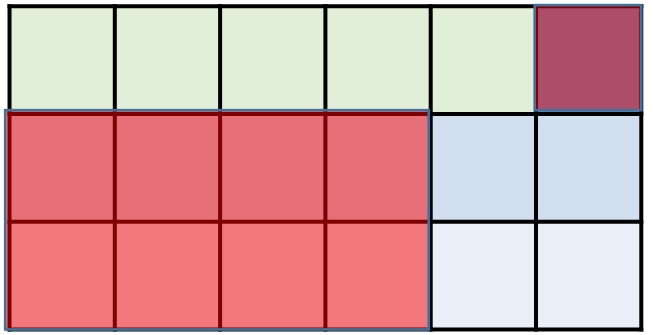


What number is Teddy thinking of?

$24 \times 4 = 96$

Teddy is thinking of 96

3 Lucy shades in part of a rectangle.



She shades some more squares.

$\frac{7}{9}$ of the rectangle is now shaded.

How many more squares did Lucy shade?

Lucy shades 9 more squares.

White Rose Maths

Problems of the Day 2020

Day 2

1 Ron and Eva each make a 3-digit number from these digit cards.

3	6	8

- Ron makes the largest even number possible. 836
- Eva makes the smallest odd number possible. 683

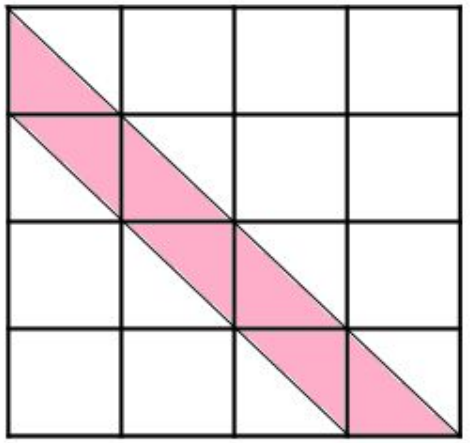
What is the difference between their numbers?

$836 - 683 = 153$

2 Circle all the fractions that are greater than 1 but less than 2

$\frac{12}{5}$ $\frac{12}{6}$ $\frac{12}{7}$ $\frac{12}{8}$

3 What fraction of this shape is shaded?



$\frac{7}{32}$

White Rose Maths

Problems of the Day 2020

Day 3

1 Which of these numbers round to 2,000 to the nearest 100?

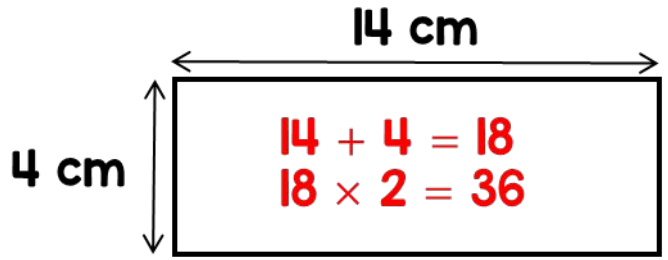
1,950 2,312 2,099 2,045

2 What are the missing numbers?

$6.4 \quad 1 \quad \boxed{5.4}$

$3\frac{2}{5} \quad 1 \quad \frac{\boxed{12}}{5}$

3 Annie has a 1 metre piece of wire. She cuts the wire into two pieces. She uses the smaller piece to make this rectangle.



She uses the other piece of wire to make a square.

What is the length of one side of the square?

100 − 36 = 64
64 ÷ 4 = 16

One side of the square is 64 cm.

White Rose Maths

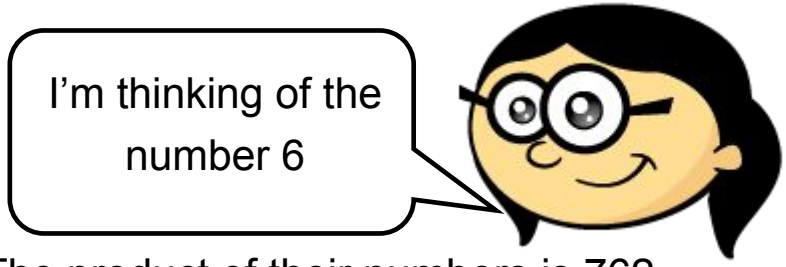
Problems of the Day 2020

Day 4

1 What are the missing digits?

3	6	+	7	5	=	1	1	1

2 Annie and Ron each think of a number.

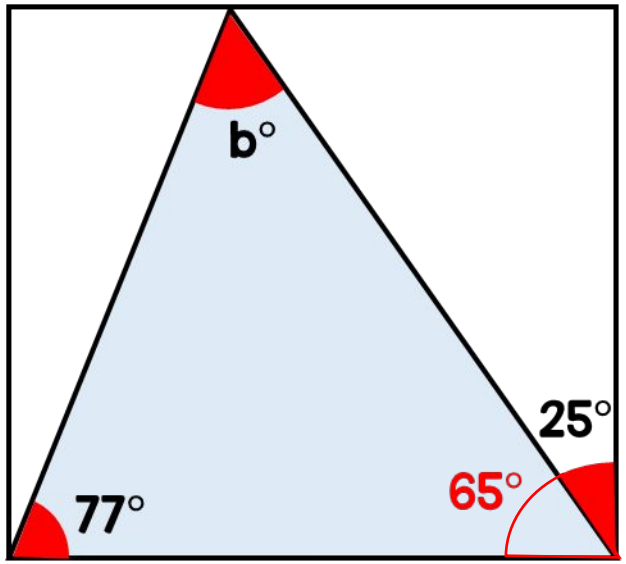


The product of their numbers is 762

Work out Ron's number.

762 ÷ 6 = 127

3 Find the size of angle b.



90 − 25 = 65

65 + 77 = 142
180 − 142 = 38

b = 38°

White Rose Maths

Problems of the Day 2020

Day 5

1 Marbles are put into bags of 10

- 67 bags of marbles are packed.
- 3 more marbles are added to each bag.

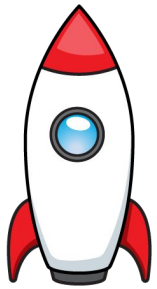
How many marbles are there in total now? $67 \times 13 = 871$

2 Work out the missing digits.

$$\boxed{5} \times \boxed{7} \times \boxed{3} = 105$$

$105 \div 5 = 21$

3 A toy train costs three times as much as a rocket.



The total cost of the train and rocket is £52

How much does the train cost?

$52 \div 4 = 13$
$13 \times 3 = 39$

The train costs £39

White Rose Maths