Answers Week 2

23 Here are the answers – and to explain how each one works, we've used a, b, c to stand for the three numbers you're given :
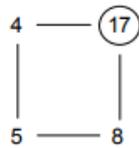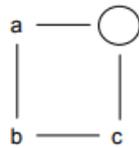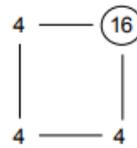
a ── ◯	4 ── (17)	4 ── (16)	4 ── (10)
b ── c	5 ── 8	4 ── 4	10 ── 5
	answer = a + b + c	answer = a + c + 2b	answer = ac - b
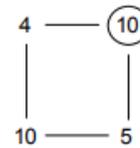
24 Before the grandfather arrives, there are 3 people in the house. Sam must have worked out their average age (32) by dividing the total of their ages by 3, so this total must have been 3 x 32 = 96.

Once the grandfather has arrived, there are 4 people in the house. If the average age of these 4 people is 42, the total of their ages must be 4 x 42, which is 168.

Of course, it's grandfather who has increased the age total in the house from 96 to 168, so he must be 72 !

Problems of the Day 2020

1 Here are 3 number patterns.

| 0 | 5 | 10 | 15 | 20 | 25 | 30 |

| 27 | 37 | 47 | 57 | 67 | 77 | 87 |

| 32 | 30 | 28 | 26 | 24 | 22 | 20 |

What is the sum of the three missing numbers?

$25 + 47 + 24 = 96$

2 Work out the value of each symbol.

$\triangle 9 + \triangle 9 = 18$

$18 \div 2 = 9$

$\triangle 9 + \diamond 21 = 30$

$30 - 9 = 21$

$\bigstar 31 - \diamond 21 = 10$

$21 + 10 = 31$

White Rose Maths

Problems of the Day 2020

Yasmin has a large blue square piece of paper.

She cuts out a 4 cm x 4 cm square from the centre.

$4 \times 4 = 16$
$16 + 65 = 81$

$81 = 9 \times 9$
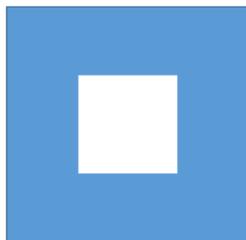
The area of the blue region is 65 cm². What is the length of the large blue square? **The length is 9 cm.**

2 Work out the value of each symbol.

$\triangle 52 + \bigstar 33 + \diamond 15 = 100$

$\triangle 52 + \diamond 15 = 67$

$\bigstar 33 - \diamond 15 = 18$

$100 - 67 = 33$
$33 - 18 = 15$
$67 - 15 = 52$

White Rose Maths