



Main Courses

3 mark questions



1. Divide £300 between Dewi and Emlyn according to the ratio 5 : 7.
2. The amount of money (in £) saved by Alan for each of 8 months was as follows:
43, 30, 75, 54, 62, 46, 24, 82.
Find the mean of the amounts saved.
3. Calculate the total surface area of the cuboid below, clearly stating the units of your answer.

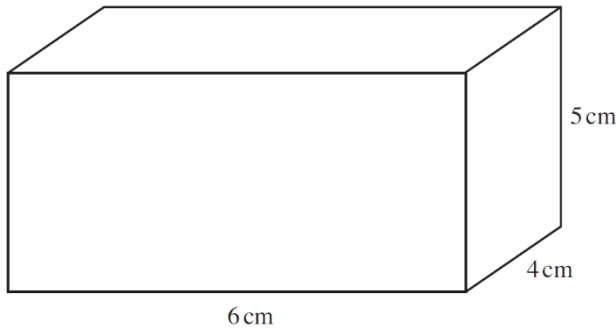


Diagram not drawn to scale.

4. Catrin has her hair cut every four weeks. She has about 1 inch cut off every four weeks in order to keep her hair about the same length. Approximately how fast does her hair grow in millimetres per day?
5. How many cakes each costing 84p can be bought with a £20 note and how much change should there be?

6. Calculate 372×34 .

7. Find the size of **each** of the angles marked x and y in the following diagram.

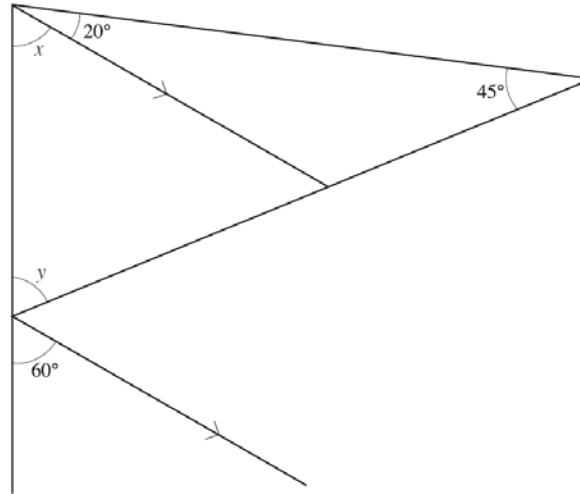
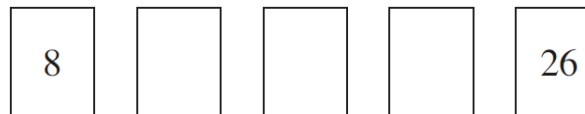
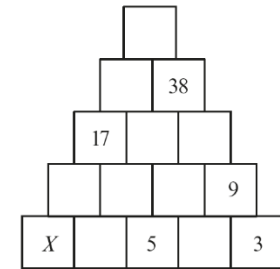


Diagram not drawn to scale.

8. (a) Write 0.5 as a percentage.
(b) Write $\frac{1}{4}$ as a percentage.
(c) Write 0.5, $\frac{1}{4}$ and 60% in ascending order.
9. A bucket when full of water weighs 18 kg. Half of the water is poured away. The bucket and water now weigh 11 kg. What is the weight of the empty bucket?
10. Calculate: (a) $-4 + -7$. (b) -4×8 . (c) $-4 \div -2$.
11. A sequence starts with 8. Equal amounts are added each time to get the next term. Write down the three missing terms of the sequence.



12. Each block shown in this tower is to have a number displayed on it. For each pair of blocks that are next to each other in the same row, the number on the block above them is the total of the numbers on the two blocks. Some numbers are already displayed. What number should be written on the box marked X?



13. Three overlapping rectangles, each 8 cm by 3 cm, are placed so as to make the shape shown in the diagram.

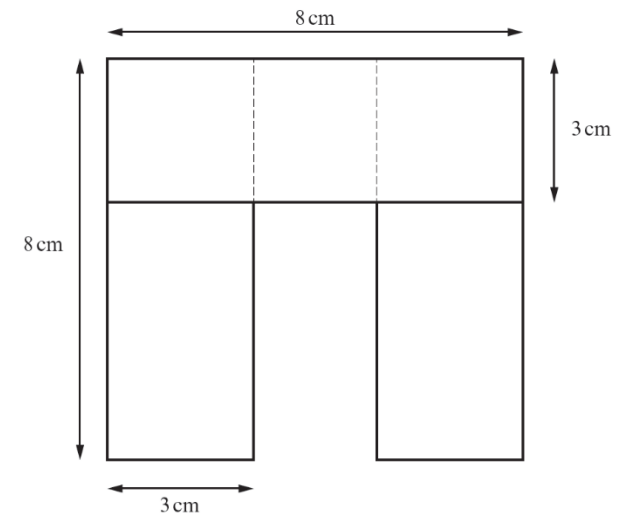


Diagram not drawn to scale

Calculate the perimeter of the shape.

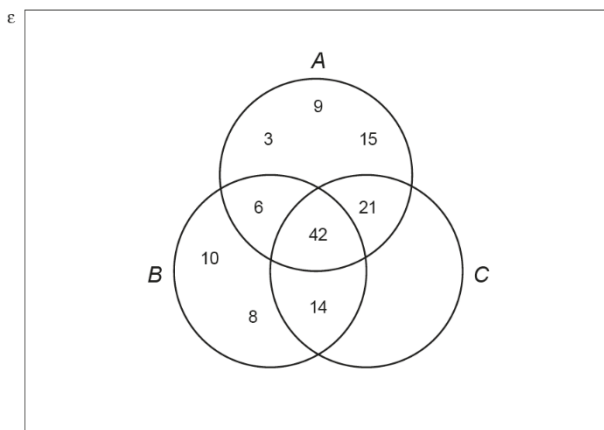


Puddings

2 mark questions



1. Calculate (a) 3.24×6 ; (b) $6.2 - 3.28$.
2. Estimate the value of 39.8×2.97 .
3. Write down the value of one half of $3\frac{1}{2}$.
4. The Venn Diagram below shows all the values of a given universal set, which have been placed within the subsets A , B and C .



(a) The descriptions for Set A and Set B are given below. Complete the description for Set C .

Set A : multiples of 3

Set B : multiples of 2

Set C : multiples of

(b) The numbers 28 and 35 are to be included in the universal set. Write 28 and 35 in the correct positions in the Venn diagram above.

5. Expand $2(x + 6)$.



Drinks

Assorted questions



1. Calculate $\frac{2}{5} + \frac{3}{4}$.
2. Simplify $5p - 3q - 8p - 7q$.
3. Draw a circle. Add a chord, a tangent and a sector to the circle.
4. Calculate the circumference and area of a circle with radius 8.3cm.
5. Change 4km to be in cm.
6. A hedge-cutting firm uses the following formula to calculate how much they should charge customers.

Charge = £2 per 10 metre length + cost of fuel

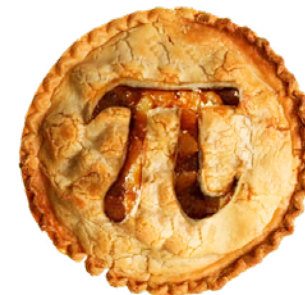
How much would the firm charge a farmer for cutting 640 metres of hedge when the cost of the fuel used was £12?



7. Amira and Sian travelled by ship to Ireland for a five-day holiday. Amira exchanged £750 into euros before departing. The exchange rate was £1 = 1.20 euros. How many euros did Amira receive?
8. Write down a factor of 96 that is between 10 and 20.
9. Calculate 75% of £500.
10. How many vertices, edges and faces does a cuboid have?
11. What is the perimeter of a rectangle which measures 4cm by 7cm?
12. Here are Class 9C's favourite colours: Red 8 Blue 6 Yellow 3 Pink 5 Purple 2. Draw a pie chart to illustrate 9C's favourite colours.

Mathematical Menu

Foundation Tier



Starters

1 mark questions



1. What comes next? 2, 5, 10, 17, 26,
2. What type of angle is the angle 165° ?
3. Calculate the mode of 5, 2, 9, 2, 5, 6.
4. Write, in words, the number 72065.
5. Write 8726 correct to the nearest 10.
6. Describe, in words, the rule for continuing the number sequence 48, 12, $3\frac{3}{4}$, ...
7. Calculate 534×8 .
8. Write down the value of the 6 in the number 9657.
9. What is the sum of the interior angles of any triangle?
10. The product of two numbers is 77. Their sum is 18. What are the two numbers?
11. One of the following numbers is the answer to 57×38 . Without working out the full multiplication, write down which one is the answer.
2163, 2164, 2165, 2166, 2167.