GCSE FOUNDATION · REVISION MAT 4

Mixed topics

1 Write 120 as a product of its prime factors.

2 Expand and simplify

$5(x + 2) + 3(x - 6)$

3 Amy and Ben share £90 in the ratio 2 : 7.

Ben says he gets £80.

Show that Ben is wrong.

4 Show that each interior angle of a regular octagon is 135°.

5 Sam says the median of 21, 15, 18, 30, 16 is 18 because it is in the middle.

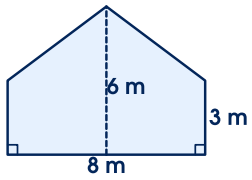
Explain why Sam is wrong.

6 A recipe for 6 people uses 240 g of flour.

Raj wants to make it for 15 people. He has 550 g of flour.

Does he have enough flour? Show your working.

7 The diagram shows a garden. All lengths are in metres.



Turf costs £9 per m^2. Work out the cost of turf for the garden.

8 Ali is x years old. Bea is 3 years older than Ali. Cal is 2 years younger than Ali.

Their ages add up to 40.

How old is each person?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Mixed topics

1 $2^3 \times 3 \times 5$

2 $5x + 10 + 3x - 18$

$= 8x - 8$

3 1 part = £90 ÷ 9 = £10

Ben gets 7 × £10 = **£70**, not £80

4 Exterior angle = 360 ÷ 8 = 45°

Interior = 180 − 45 = **135°** ✓

5 The numbers must be in order first: 15, 16, 18, 21, 30

Median = **18**

6 240 ÷ 6 × 15 = 600 g

No, he needs 50 g more.

7 Area = $8 \times 3 + \frac{1}{2} \times 8 \times 3 = 36\ m^2$

Cost = 36 × £9 = **£324**

8 $x + (x + 3) + (x - 2) = 40$

$3x = 39$, so $x = 13$

Ali **13**, Bea **16**, Cal **11**