GCSE FOUNDATION · REVISION MAT 10

Mixed topics

1 Write 228 as a product of its prime factors.

2 Expand and simplify

$6(x + 1) + 4(x - 3)$

3 Amy and Ben share £150 in the ratio 7 : 3.

Ben says he gets £60.

Show that Ben is wrong.

4 Show that each interior angle of a regular dodecagon (12 sides) is 150°.

5 Sam says the median of 13, 19, 11, 16, 25 is 11 because it is in the middle.

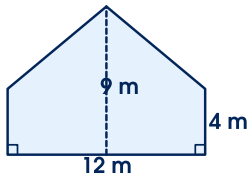
Explain why Sam is wrong.

6 A recipe for 3 people uses 120 g of flour.

Raj wants to make it for 8 people. He has 350 g of flour.

Does he have enough flour? Show your working.

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



Turf costs £8 per m^2. Work out the cost of turf for the garden.

8 Ali is x years old. Bea is 6 years older than Ali. Cal is 5 years younger than Ali.

Their ages add up to 58.

How old is each person?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 10

Mixed topics

1 $2^2 \times 3 \times 19$

2 $6x + 6 + 4x - 12$

$= 10x - 6$

3 1 part = £150 ÷ 10 = £15

Ben gets 3 × £15 = **£45**, not £60

4 Exterior angle = 360 ÷ 12 = 30°

Interior = 180 − 30 = **150°** ✓

5 The numbers must be in order first: 11, 13, 16, 19, 25

Median = **16**

6 120 ÷ 3 × 8 = 320 g

Yes, 30 g spare.

7 Area = $12 \times 4 + \frac{1}{2} \times 12 \times 5 = 78\ m^2$

Cost = 78 × £8 = **£624**

8 $x + (x + 6) + (x - 5) = 58$

$3x = 57$, so $x = 19$

Ali **19**, Bea **25**, Cal **14**