GCSE HIGHER · MIXED REVISION MAT 1

Mixed topics

1 Increase £240 by 12.5%.

2 Write as a single power of 2.

$2^5 \times 2^{-2}$

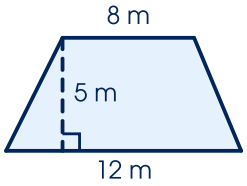
3 The mean of five numbers is 9.

Four of them are 4, 7, 10 and 12.

Show that the fifth number is 12.

4 A garden is this trapezium.

Turf costs £6.50 per m².



Find the cost of turfing it.

5 Show that

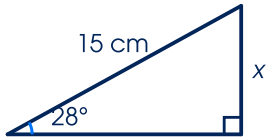
$(x + 6)(x - 2) - (x + 2)^2 = -16$

6 A 2.4 kg block has density 8 g/cm³.

It is melted and made into a cube.

Find the side of the cube.

7 Show that x = 7.04 cm, to 3 s.f.



8 A bag has 6 red and 4 blue balls.

Two are taken without replacement.

Find P(at least one blue).

ANSWERS · MIXED REVISION MAT 1

Mixed topics

1 240×1.125

£270

2 2^3

3 Total $5 \times 9 = 45$

$45 - 33 = 12$

4 Area $\frac{1}{2}(8 + 12) \times 5 = 50\ m^2$

£325

5 $x^2 + 4x - 12 - (x^2 + 4x + 4)$

$= -16$

6 Volume $2400 \div 8 = 300\ cm^3$

$\sqrt[3]{300} = 6.69$ cm

7 $x = 15 \sin 28°$

$= 7.04$ cm

8 P(both red) $= \frac{6}{10} \times \frac{5}{9} = \frac{1}{3}$

$\frac{2}{3}$

Mr&Mrs MATHS