GCSE HIGHER · MIXED REVISION MAT 4

Mixed topics

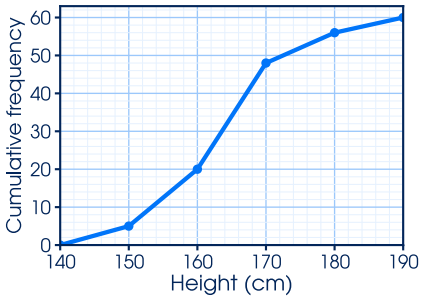
1 Write 42 as a percentage of 56.

2 Factorise

$x^2 - 49$

3 Show that a triangle with sides 9 cm, 40 cm and 41 cm is right-angled.

4 Estimate how many heights are between 155 cm and 172 cm.



5 Show that

$(\sqrt{5} + \sqrt{3})(\sqrt{5} - \sqrt{3}) = 2$

6 Green paint is blue : yellow = 2 : 3.

Jo has 4 litres of blue and 9 litres of yellow.

What is the most green paint she can make?

7 Show that the solutions of $x^2 - 6x + 4 = 0$ are $3 \pm \sqrt{5}$.

8 Three fair coins are flipped.

Given that at least two land heads, find P(all three are heads).

Mr&Mrs MATHS

ANSWERS · MIXED REVISION MAT 4

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1 $\frac{42}{56} \times 100$

75%

2 $(x - 7)(x + 7)$

3 $81 + 1600 = 1681$

$= 41^2$

4 Read at $155 \approx 12$, at $172 \approx 50$

About 37

5 $5 - 3$

$= 2$

6 Blue limits: 4 L

blue needs 6 L yellow

10 litres

7 $(x - 3)^2 - 5 = 0$

$x = 3 \pm \sqrt{5}$

8 HHH, HHT, HTH, THH

$\frac{1}{4}$

Mr&Mrs MATHS