GCSE HIGHER · REVISION MAT 2

Exact trigonometric values

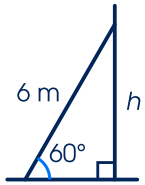
1 Write down the exact value of $\cos 0°$.

2 Write down the exact value of $\sin 90°$.

3 Show that $2 \sin 30° = \tan 45°$.

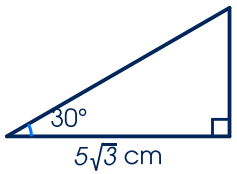
4 A 6 m ladder makes an angle of 60° with the ground.

Find the exact height it reaches up the wall.

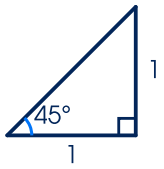


5 Show that $\cos 30° = \sin 60°$.

6 Find the exact length of the hypotenuse.



7 Use a right-angled isosceles triangle with shorter sides 1 to show that $\sin 45° = \frac{\sqrt{2}}{2}$.



8 Find the exact value of

$\sin 60° \cos 30° + \sin 30° \cos 60°$

Mr&Mrs MATHS

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Exact trigonometric values

1 1

2 1

3 $2 \times \frac{1}{2} = 1$

tan 45° = 1

4 $6 \sin 60° = 6 \times \frac{\sqrt{3}}{2}$

$3\sqrt{3}$ m

5 **Both equal $\frac{\sqrt{3}}{2}$.**

6 $\cos 30° = \frac{5\sqrt{3}}{h}$

***h* = 10 cm**

7 Hypotenuse $\sqrt{2}$

$\sin 45° = \frac{1}{\sqrt{2}}$

$= \frac{\sqrt{2}}{2}$

8 $\frac{3}{4} + \frac{1}{4}$

1

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