Exact Value Trigonometry GREEN

1. Find the exact values of:

a) $\sin 30°$ _____ b) $\tan 45°$ _____ c) $\sin 150°$ _____

d) $\sin 330°$ _____ e) $\cos 90°$ _____ f) $\sin -90°$ _____

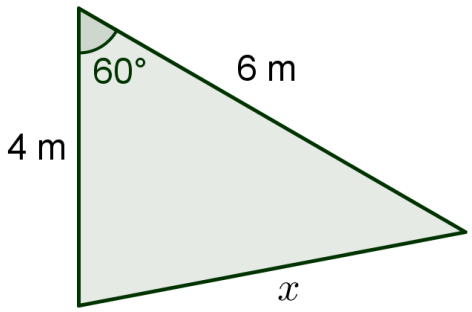
2. If $\sin\theta = \frac{1}{2}$, find the values of:

a) $\cos\theta$ _____ b) $\tan\theta$ _____

3. Find the value of $\sin\theta$ when $\tan\theta = 1$ _____

4. For the triangle shown opposite, calculate:

a) the area of this triangle _____ m²



b) the exact length of the third side, x _____ m

5. Arrange the following in order of size starting with the smallest:

$\sin 10°$ $\sin 90°$ $\sin 135°$ $\sin 270°$

Justify your answer.

_____ _____ _____ _____

Exact Value Trigonometry AMBER

Remember the graphs are periodic and symmetrical (excluding tangent!)

1. Find the exact values of:

a) $\sin 30°$ _____ b) $\tan 45°$ _____ c) $\sin 150°$ _____

d) $\sin 330°$ _____ e) $\cos 90°$ _____ f) $\sin -90°$ _____

2. If $\sin\theta = \frac{1}{2}$, find the values of:

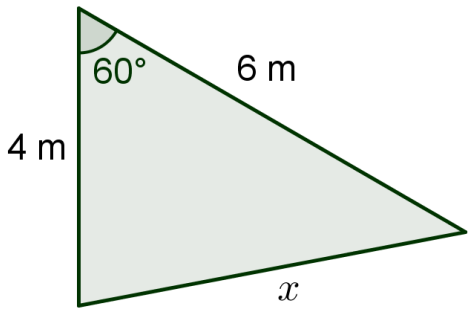
Use your table!

a) $\cos\theta$ _____ b) $\tan\theta$ _____

3. Find the value of $\sin\theta$ when $\tan\theta = 1$ _____

4. For the triangle shown opposite, calculate:

a) the area of this triangle _____ m²



Area $= \frac{1}{2}ab\sin C$

b) the exact length of the third side, x _____ m

$a^2 = b^2 + c^2 - 2bc\cos A$

5. Arrange the following in order of size starting with the smallest:

$\sin 10°$ $\sin 90°$ $\sin 135°$ $\sin 270°$

Justify your answer.

_____ _____ _____ _____

Exact Value Trigonometry RED

1. Find the exact values of:

a) $\sin 30°$ _____ b) $\tan 45°$ _____ c) $\sin 150°$ _____

d) $\sin 330°$ _____ e) $\cos 90°$ _____ f) $\sin -90°$ _____

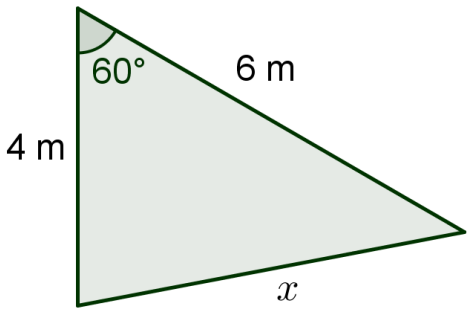
2. If $\sin\theta = \frac{1}{2}$, find the values of:

Use your table!

a) $\cos\theta$ _____ b) $\tan\theta$ _____

3. Find the value of $\sin\theta$ when $\tan\theta = 1$ _____

4. For the triangle shown opposite, calculate:



a) the **exact** area of this triangle _____ m²

$\text{Area} = \frac{1}{2}ab\sin C$

$\text{Area} = \frac{1}{2} \times 4 \times 6 \times \sin 60$

$=$

b) the **exact** length of the third side, x _____ m

$a^2 = b^2 + c^2 - 2bc\cos A$

$x^2 = 4^2 + 6^2 - 2 \times 4 \times 6 \times \cos 60$

$=$

5. Arrange the following in order of size starting with the smallest:

$\sin 10°$ $\sin 90°$ $\sin 135°$ $\sin 270°$

Justify your answer.

Remember the graphs are periodic and symmetrical (excluding tangent!) and use your table.

_____ _____ _____ _____