

**EXACT SIN/COS/TAN VALUES – PRACTICE QUESTIONS
NON-CALCULATOR**



1.
 - (a) Write down the value of $\cos(0)$.
 - (b) Write down the value of $\sin(90)$.
 - (c) Write down the value of $\cos(90)$.
 - (d) Write down the value of $\sin(0)$.
 - (e) Write down the value of $\cos(45)$.
 - (f) Write down the value of $\tan(30)$.
 - (g) Write down the value of $\sin(60)$.
 - (h) Write down the value of $\sin(45)$.
 - (i) Write down the value of $\cos(60)$.
 - (j) Write down the value of $\tan(45)$.
 - (k) Write down the value of $\tan(60)$.
 - (l) Write down the value of $\sin(30)$.
 - (m) Write down the value of $\cos(30)$.
 - (n) Write down the value of $\tan(0)$.

2.

(a) $\sin(x) = 1$ and $0 \leq x \leq 90$.

Find x .

(b) $\cos(y) = \frac{1}{2}$ and $0 \leq y \leq 90$.

Find y .

(c) $\sin(z) = \frac{\sqrt{2}}{2}$ and $0 \leq z \leq 90$.

Find z .

(d) $\cos(a) = 0$ and $0 \leq a \leq 90$.

Find a .

(e) $\sin(b) = \frac{\sqrt{3}}{2}$ and $0 \leq b \leq 90$.

Find b .

(f) $\tan(c) = \frac{\sqrt{3}}{3}$ and $0 \leq c \leq 90$.

Find c .

(g) $\cos(d) = \frac{\sqrt{2}}{2}$ and $0 \leq d \leq 90$.

Find d .

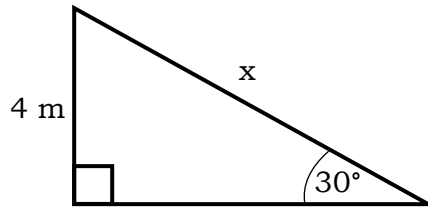
(h) $\tan(e) = \sqrt{3}$ and $0 \leq e \leq 90$.

Find e .

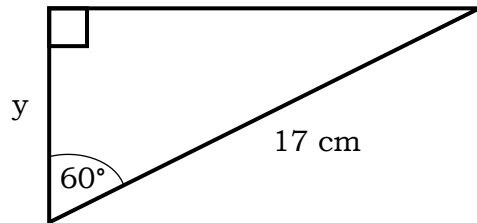
(i) $\sin(f) = \frac{1}{2}$ and $0 \leq f \leq 90$.

Find f .

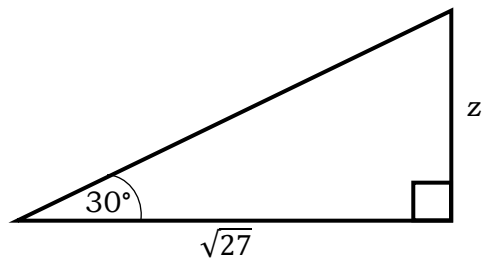
3.
Find x .



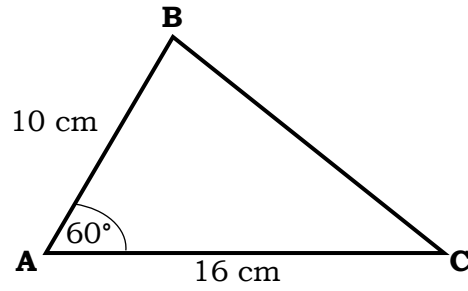
4.
Find y .



5.
Find z .



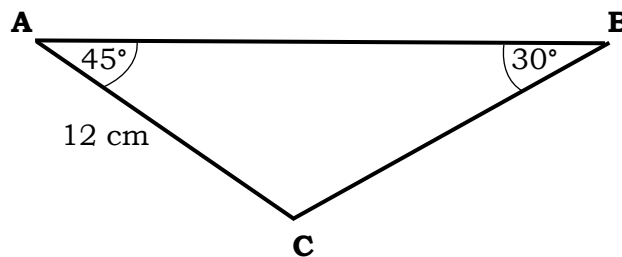
6.
Find the area of ABC. Give your answer in the form $a\sqrt{b}$ where a and b are integers.



7.
Show that

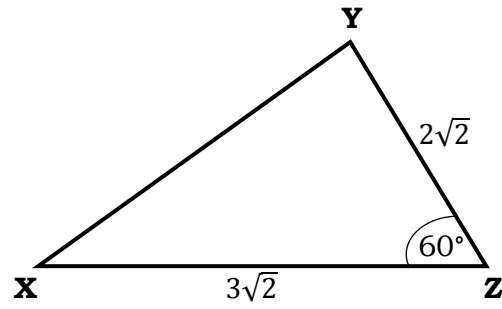
$$\tan(60) \times \sin(30) = \cos(30)$$

8.
Find BC. Give your answer in the form $a\sqrt{2}$ where a is an integer.



9.

Find XY. Give your answer in the form \sqrt{a} .



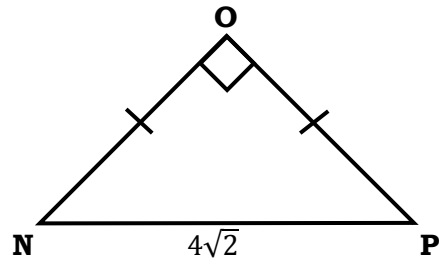
10.

Express

$$\frac{\cos(30) + \tan(45)}{\sin(90) - \cos(60)}$$

in the form $\sqrt{a} + b$ where a and b are integers.

11.
Find OP.

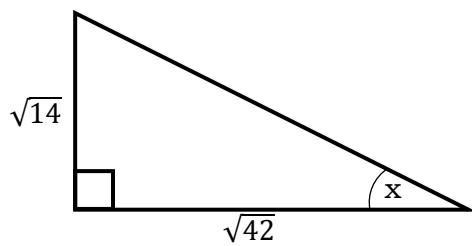


12.
Show that

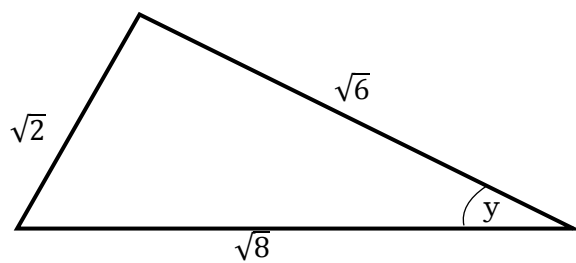
$$2(\sin 30 + \cos 30)(\tan 45 - \tan 60)$$

is a negative integer.

13.
Find x .



14.
Find y .



15.

Express

$$(\tan 30 + \sin 60)^2$$

as a fully simplified mixed number

16.

Find w .

