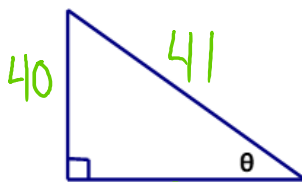


1. Given the following trigonometric values, label the triangle's sides and fill in the blanks.

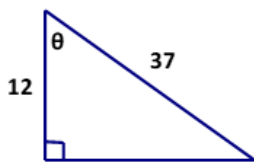
$\sin \theta = \frac{40}{41}$ (OPP/HYP) $\tan \theta = \frac{40}{9}$ (OPP/ADJ)

$\cos \theta = \frac{9}{41}$



$\sin(90-\theta) = \frac{9}{41}$ $\cos(90-\theta) = \frac{40}{41}$ $\tan(90-\theta) = \frac{9}{40}$

2. Given the triangle below, find the length missing side. Then answer the questions about the triangle.



Missing side length = 35

$12^2 + b^2 = 37^2$
 $144 + b^2 = 1369$
 $b^2 = 1225$
 $b = 35$

$\sin \theta = \frac{35}{37}$

$\cos(90-\theta) = \frac{35}{37}$

$\cos \theta = \frac{12}{37}$

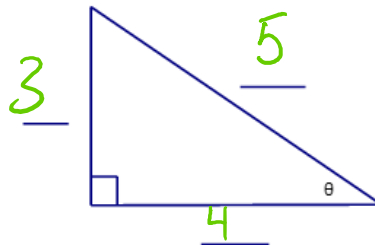
$\frac{\sin \theta}{\cos \theta} = \frac{\frac{35}{37}}{\frac{12}{37}} = \frac{35}{12}$ $\tan(90-\theta) = \frac{12}{35}$

3. Given the $\sin \theta = \frac{3}{5}$, label the picture.

Missing side length = 4

$\cos \theta = \frac{4}{5}$

$\sin(90-\theta) = \frac{4}{5}$

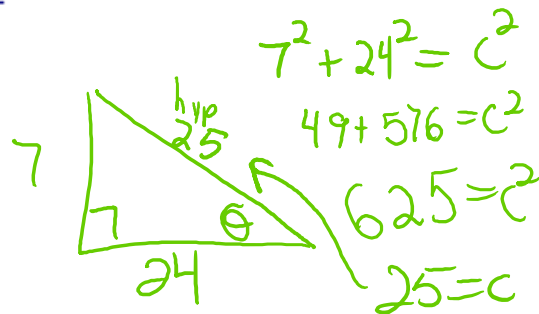


3-4-5 triangle

4. Given $\tan \theta = \frac{7}{24}$, draw a right triangle and find $\sin \theta$ & $\cos \theta$.

$\sin(\theta) = \frac{7}{25}$

$\cos(\theta) = \frac{24}{25}$



5. Given $\sin \theta = \frac{8}{17}$

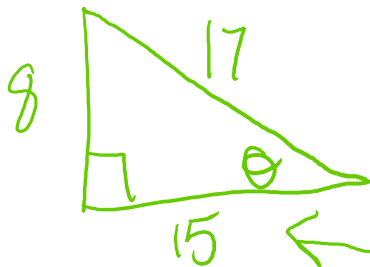
$\cos \theta = \frac{15}{17}$

$\tan \theta = \frac{8}{15}$

$\sin(90-\theta) = \frac{15}{17}$

$\cos(90-\theta) = \frac{8}{17}$

$\tan(90-\theta) = \frac{15}{8}$



$8^2 + b^2 = 17^2$
 $64 + b^2 = 289$
 $b^2 = 225$
 $b = 15$