

# Right angled triangles: Part II

## - an introduction to trigonometry -

Checkpoints.

Find decimal approximations for

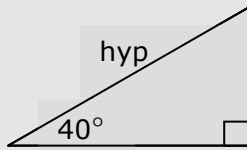
a)  $\sin 40^\circ = 0.64$

b)  $\cos 73^\circ = 0.29$

c)  $\tan 45^\circ = 1$

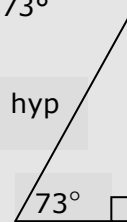
Use these right angled triangles to illustrate the ratios you found earlier.

a)  $\sin 40^\circ$



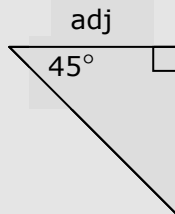
opp = 64% of hyp

b)  $\cos 73^\circ$



adj = 29% of hyp

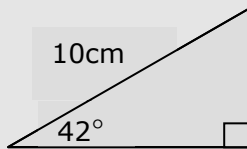
c)  $\tan 45^\circ$



opp = adj

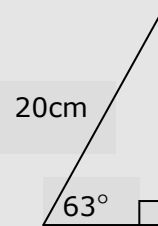
Use trigonometric ratios to find the length marked x.

a)



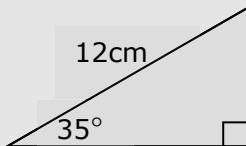
$\sin(42) = 0.67$   
 $x = 0.67 \times 10$   
 $x = 6.69\text{cm}$

b)



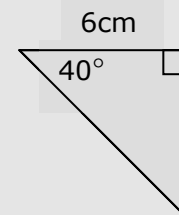
$\cos(63) = 0.45$   
 $x = 0.45 \times 20$   
 $x = 9.08\text{cm}$

c)



$\cos(35) = 0.82$   
 $x = 0.82 \times 12$   
 $x = 9.83\text{cm}$

d)



$\tan(40) = 0.84$   
 $x = 0.84 \times 6$   
 $x = 5.03\text{cm}$