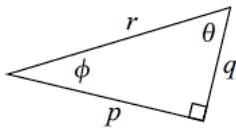


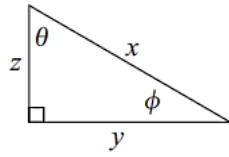
1 For each of the following triangles find:

i  $\sin \theta$     ii  $\cos \theta$     iii  $\tan \theta$     iv  $\sin \phi$     v  $\cos \phi$     vi  $\tan \phi$

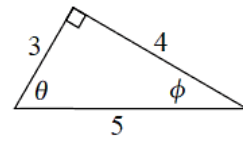
a



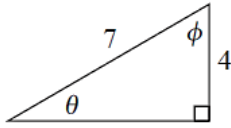
b



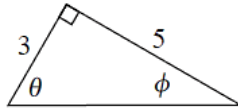
c



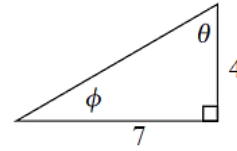
d



e

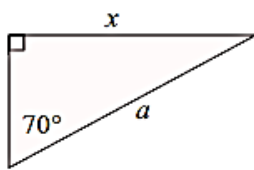


f

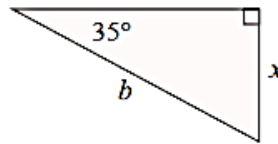


2 Construct a trigonometric equation connecting the angle with the sides given:

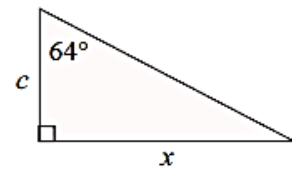
a



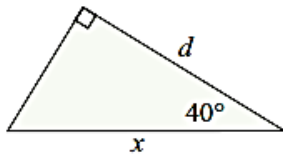
b



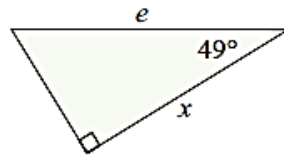
c



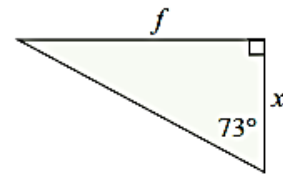
d



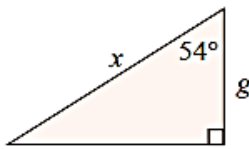
e



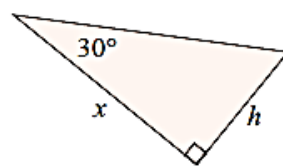
f



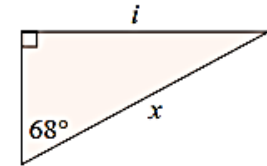
g



h

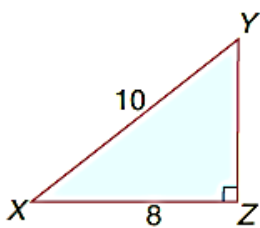


i

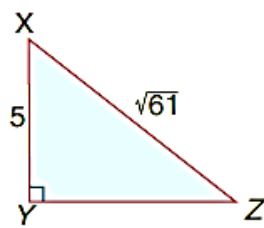


4 Use Pythagoras' theorem to find side YZ, then state the value of  $\tan X$ .

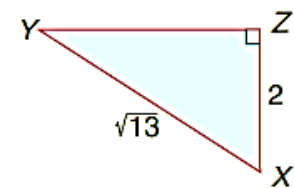
a



b

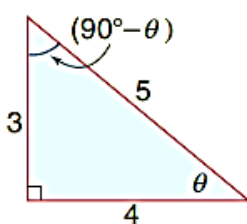


c



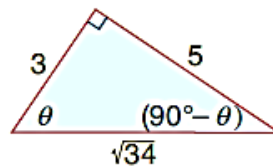
5 Complete the statements below.

a



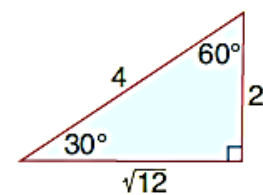
$\sin \theta = \dots$   
 $\cos (90^\circ - \theta) = \dots$

b



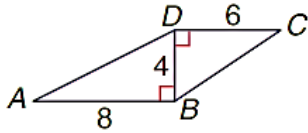
$\cos \theta = \dots$   
 $\sin (90^\circ - \theta) = \dots$

c

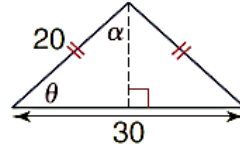


$\sin 60^\circ = \dots$   
 $\cos 30^\circ = \dots$

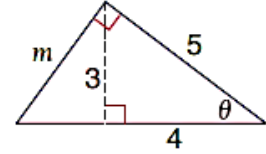
**11 a** Find i  $\sin A$     ii  $\sin C$



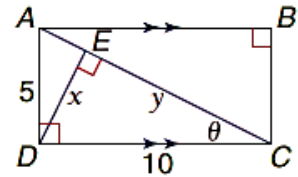
**b** Find i  $\sin \theta$     ii  $\cos \alpha$



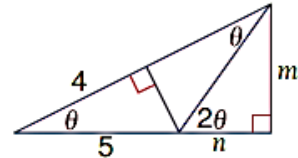
**12 a** By finding  $\tan \theta$  in two different triangles, find the value of  $m$ .



**b** Find  $x$  and  $y$ .  
(Note:  $DE = x$  and  $CE = y$ .)



**c** Find:  
i  $\sin \theta$     ii  $\cos \theta$   
iii  $m$     iv  $n$   
v  $\sin 2\theta$   
vi Show that  $\sin 2\theta = 2 \times \sin \theta \times \cos \theta$



**3** Find  $x$  correct to 1 decimal place.

