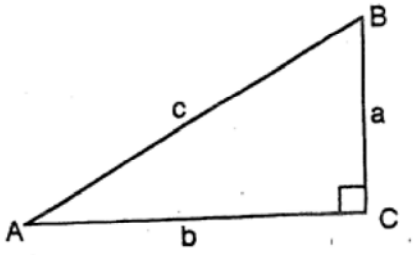
Sine, Cosine and Tangent

Given ΔABC



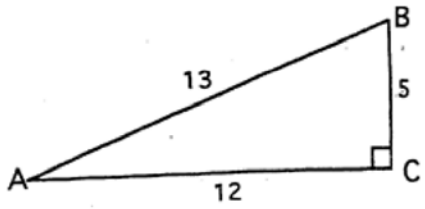
$$\sin A = \frac{\text{opposite}}{\text{hypotenuse}} = \frac{a}{c}$$

$$\cos A = \frac{\text{adjacent}}{\text{hypotenuse}} = \frac{b}{c}$$

$$\tan A = \frac{\text{opposite}}{\text{adjacent}} = \frac{a}{b}$$

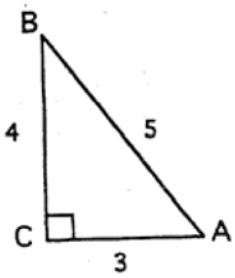
Use definitions to find the following trigonometric ratios.

1.



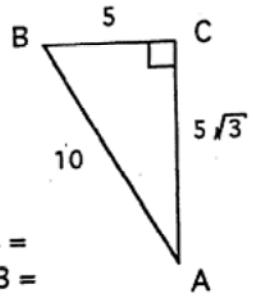
sin A =
cos A =
tan A =

2.



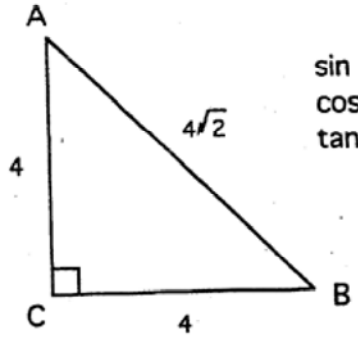
sin B =
cos B =
tan B =

3.



sin B =
cos B =
tan B =

4.



sin A =
cos A =
tan A =

Find ratios (4 decimal places) and angles (nearest degree) using table or calculator.

5. a) sin 34° =
   b) cos 56° =

6. a) cos 61° =
   b) sin 29° =

7. a) tan 78° =
   b) tan 12° =

8. a) sin x = 0.9063
      x =
   b) cos x = 0.5000
      x =

9. a) cos x = 0.1219
      x =
   b) sin x = 0.3420
      x =

10. a) tan x = 0.5774
      x =
    b) tan x = 11.4301
      x =