



1. In $\triangle EFG$, right angled at F, if $\tan E = \frac{1}{4}$, find $\sin E \cos G + \cos E \sin G$

- (i) $\frac{1}{17}\sqrt{17}$ (ii) $\sqrt{17}$ (iii) $\frac{4}{17}\sqrt{17}$ (iv) $\frac{1}{4}\sqrt{17}$ (v) 1

2. In $\triangle MNO$, right angled at N, if $\tan M = \frac{5}{6}$, find $\cos M \cos O - \sin M \sin O$

- (i) $\frac{1}{6}\sqrt{61}$ (ii) $\frac{5}{61}\sqrt{61}$ (iii) $\frac{6}{61}\sqrt{61}$ (iv) $\frac{1}{5}\sqrt{61}$ (v) 0

3. Find the length of the side of a 5-sided regular polygon inscribed in a circle of radius 1 m

- (i) 1.2756 m (ii) 1.0756 m (iii) 1.2256 m (iv) 1.1756 m

4. Find the length of the chord of the unit circle subtending an angle of 102° at the centre

- (i) 1.5542 (ii) 1.4542 (iii) 1.6542 (iv) 1.6042

5. Find the area of the right angled triangle with hypotenuse 6 cm and one of the acute angle being 34°

- (i) 10.3444 cm (ii) 7.3444 cm (iii) 9.3444 cm (iv) 8.3444 cm

6. Find the area of an isosceles triangle with base 4 cm and vertical angle 66°

- (i) 5.1595 cm (ii) 6.1595 cm (iii) 7.1595 cm (iv) 8.1595 cm

7. If R, S and T are the interior angles of a triangle, then $\sin\left(\frac{R+S}{2}\right) =$

- (i) $\cos\left(\frac{R}{2}\right)$ (ii) $\cos\left(\frac{T}{2}\right)$ (iii) $\sin T$ (iv) $\sin\left(\frac{T}{2}\right)$ (v) $\sin\left(\frac{R}{2}\right)$

8. Find the length of the side of a 10-sided regular polygon inscribed in a circle of radius 1 m

- (i) 0.7180 m (ii) 0.6180 m (iii) 0.6680 m (iv) 0.5180 m

9. Find the length of the chord of the unit circle subtending an angle of 129° at the centre

- (i) 1.7052 (ii) 1.8552 (iii) 1.8052 (iv) 1.9052

10. Find the area of the right angled triangle with hypotenuse 4 cm and one of the acute angle being 47°

- (i) 5.9905 cm (ii) 3.9905 cm (iii) 2.9905 cm (iv) 4.9905 cm

11. Find the area of an isosceles triangle with base 8 cm and vertical angle 65°

- (i) 25.1138 cm (ii) 26.1138 cm (iii) 27.1138 cm (iv) 24.1138 cm

Assignment Key

1) (v)

2) (v)

3) (iv)

4) (i)

5) (iv)

6) (ii)

7) (ii)

8) (ii)

9) (iii)

10) (ii)

11) (i)