



1. In  $\triangle BCD$ , right angled at C, if  $\tan B = \frac{4}{9}$ , find  $\sin B \cos D + \cos B \sin D$

- (i) 1 (ii)  $\frac{1}{9}\sqrt{97}$  (iii)  $\frac{1}{4}\sqrt{97}$  (iv)  $\frac{4}{97}\sqrt{97}$  (v)  $\frac{9}{97}\sqrt{97}$

2. In  $\triangle LMN$ , right angled at M, if  $\tan L = \frac{1}{2}$ , find  $\cos L \cos N - \sin L \sin N$

- (i) 0 (ii)  $\frac{2}{5}\sqrt{5}$  (iii)  $\frac{1}{5}\sqrt{5}$  (iv)  $\frac{1}{2}\sqrt{5}$  (v)  $\sqrt{5}$

3. Find the length of the side of a 7-sided regular polygon inscribed in a circle of radius 1 m

- (i) 0.9110 m (ii) 0.9610 m (iii) 0.8610 m (iv) 0.7610 m

4. Find the length of the chord of the unit circle subtending an angle of  $113^\circ$  at the centre

- (i) 1.7678 (ii) 1.6678 (iii) 1.7178 (iv) 1.5678

5. Find the area of the right angled triangle with hypotenuse 3 cm and one of the acute angle being  $55^\circ$

- (i) 3.1145 cm (ii) 1.1145 cm (iii) 4.1145 cm (iv) 2.1145 cm

6. Find the area of an isosceles triangle with base 8 cm and vertical angle  $44^\circ$

- (i) 41.6040 cm (ii) 38.6040 cm (iii) 40.6040 cm (iv) 39.6040 cm

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

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

8. Find the length of the side of a 15-sided regular polygon inscribed in a circle of radius 1 m

- (i) 0.5158 m (ii) 0.4658 m (iii) 0.3158 m (iv) 0.4158 m

9. Find the length of the chord of the unit circle subtending an angle of  $145^\circ$  at the centre

- (i) 1.9574 (ii) 1.8074 (iii) 1.9074 (iv) 2.0074

10. Find the area of the right angled triangle with hypotenuse 7 cm and one of the acute angle being  $43^\circ$

- (i) 14.2210 cm (ii) 13.2210 cm (iii) 11.2210 cm (iv) 12.2210 cm

11. Find the area of an isosceles triangle with base 4 cm and vertical angle  $35^\circ$

- (i) 12.6863 cm (ii) 14.6863 cm (iii) 13.6863 cm (iv) 11.6863 cm

## Assignment Key

- 
- |          |         |          |          |         |         |
|----------|---------|----------|----------|---------|---------|
| 1) (i)   | 2) (i)  | 3) (iii) | 4) (ii)  | 5) (iv) | 6) (iv) |
| 7) (iii) | 8) (iv) | 9) (iii) | 10) (iv) | 11) (i) |         |