

Question 1

$$\sin \theta = -\frac{\sqrt{8}}{3} \quad \csc \theta = -\frac{3\sqrt{8}}{8}$$

$$\cos \theta = \frac{1}{3}$$

$$\sec \theta = 3$$

$$\tan \theta = -\sqrt{8}$$

$$\cot \theta = -\frac{\sqrt{8}}{8}$$

Question 2.

$$\frac{\pi}{6} + 2\pi n, \frac{11\pi}{6} + 2\pi n, \frac{5\pi}{6} + 2\pi n, \frac{7\pi}{6} + 2\pi n$$

Question 3

$$7\sin^2 \beta$$

Question 4

$$\sin x = -\frac{7}{9}$$

$$\csc(x) = -\frac{9}{7}$$

$$\cos(x) = -\frac{\sqrt{32}}{9}$$

$$\sec(x) = -\frac{9\sqrt{32}}{32}$$

$$\tan(x) = \frac{7\sqrt{32}}{32}$$

$$\cot x = \frac{\sqrt{32}}{7}$$

Question 5

$$\frac{\pi}{2} + 2\pi n, \frac{3\pi}{2} + 2\pi n, \pi + 2\pi n, 2\pi n$$

Question 6

$$\cos(\theta)$$

Question 7

(a) $\frac{6}{0.5}$ or 6×2 or 12

~~Question~~

(b) $6 - \sec 300$ or ~~6×0.5~~ $\frac{6}{0.5}$ or 6×2 or 12.

Question 8.

~~$1 + 2 \sin \theta$~~

$$\left. \begin{array}{l} 1^{\text{st}} \text{ step} = 1 + \sin \theta \\ 2^{\text{nd}} \text{ step} = 1 + 2 \sin \theta \\ 3^{\text{rd}} \text{ step} = \sin \theta \\ 4^{\text{th}} \text{ step} = 1 + \sin \theta \end{array} \right\} \text{ Fill these answers stepwise.}$$

Question 9.

$\frac{2\pi}{3} + \pi n$ ie, $\frac{2}{3} \pi + \pi n$

Question 10.

$\frac{\tan x}{\tan x}$ OR 1