

Give answers to 4 decimals places unless otherwise indicated as "exact".

11. What rotation is co-terminal to $\frac{-17\pi}{6}$ (within the restriction) $[0, 2\pi[$.

Answer (exact): $\frac{7\pi}{6}$

12. In which quadrant is the trig point $P(-1336^\circ)$?

134° $(-0.2419, .9613)$

Answer: 2nd

13. Given a circle (with center O) whose arc \widehat{AB} has a length of 40 cm and a radius of 6 cm, find the corresponding central angle ($\angle AOB$) in radians.

$$l = (r)(\theta) \quad 40 = (6)(\theta) \quad \frac{40}{6} = \theta$$

Answer (exact): $\frac{20}{3}$

14. What is the exact value of $\cot \frac{7\pi}{6}$?

$$\left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right) \quad \frac{-\sqrt{3}}{2} \div -\frac{1}{2} = \sqrt{3}$$

Answer (exact): $\sqrt{3}$

15. If $\sec x = \frac{5}{4}$, then what is the value of $\sin x$?

Answer (exact): $-\frac{3}{5}$

Q4 $\cos x = \frac{4}{5} \therefore \left(\frac{4}{5}\right)^2 + y^2 = 1 \quad y^2 = \frac{25}{25} - \frac{16}{25} = \frac{9}{25}$

16. Knowing that $\pi \leq t \leq \frac{3\pi}{2}$, find the value of t , if $\sin t = -0.3$.



$$\pi + .3047$$

Answer: 3.4463

17. What is the exact value of $\sin \frac{-5\pi}{3}$?

Answer: $\frac{\sqrt{3}}{2}$

18. In which quadrant is $P(-5)$?

Answer: 1

19. Given the trig point $P(\theta) = \left(-\frac{4}{5}, \dots\right)$, and knowing that $P(\theta)$ is located in the 2nd quadrant, determine the value of $\tan \theta$.

Answer (exact): $\frac{5}{3}$

$$\csc \theta$$

20. Are the following rotations co-terminal: $\frac{3\pi}{4}$ and $\frac{-29\pi}{4}$

$$\frac{3\pi}{4} - \left(-\frac{29\pi}{4}\right) = \frac{32\pi}{4} = 8\pi$$

Answer: YES!

Give answers to 4 decimals places unless otherwise indicated as "exact".

1. Find the rotation co-terminal to $\frac{-17\pi}{6}$ within the restriction $[0, 2\pi[$.

Answer (exact):

2. In which quadrant would you find trig point $P(-1336^\circ)$?

Answer:

3. Given a circle (with center O) whose arc \widehat{AB} has a length of 40 cm and a radius of 6 cm, find the corresponding central angle ($\angle AOB$) in radians.

Answer (exact):

4. What is the exact value of $\cot \frac{7\pi}{6}$?

Answer (exact):

5. If $\sec x = \frac{5}{4}$, then what is $\sin x$?

Answer (exact):

6. Knowing that $\pi \leq t \leq \frac{3\pi}{2}$, find the value of t if $\sin t = -0.3$.

Answer:

7. Determine the exact value of $\sin \frac{-5\pi}{3}$?

Answer:

8. In which quadrant is $P(-5)$?

Answer:

9. Given the trig point $P(\theta) = \left(-\frac{4}{5}, \dots\right)$, and knowing that $P(\theta)$ is located in the 2nd quadrant, determine $\tan \theta$.

Answer (exact):

10. Are the following rotations co-terminal: $\frac{3\pi}{4}$ and $\frac{-29\pi}{4}$

Answer: