

PUH Homework Ch. 4 Review (New Book)

1. Find Exact values with no calculator and not looking at the unit circles in your book or notes.
(You must draw your unit circles again from memory)

- A) $\tan \frac{9\pi}{3} = \underline{\hspace{2cm}}$ B) $\cot \frac{-8\pi}{3} = \underline{\hspace{2cm}}$ C) $\sec 315^\circ = \underline{\hspace{2cm}}$ D) $\sin \frac{17\pi}{4} = \underline{\hspace{2cm}}$
 E) $\sec 725^\circ = \underline{\hspace{2cm}}$ F) $\cos \frac{24\pi}{6} = \underline{\hspace{2cm}}$ G) $\sec 150^\circ = \underline{\hspace{2cm}}$ H) $\tan 225^\circ = \underline{\hspace{2cm}}$
 I) $\csc \frac{11\pi}{3} = \underline{\hspace{2cm}}$ J) $\sin^{-1} \frac{\pi}{2} = \underline{\hspace{2cm}}$

2. Use a calculator - approximate to 4 decimal places

- A) $\sin -242^\circ = \underline{\hspace{2cm}}$ B) $\cos 62^\circ = \underline{\hspace{2cm}}$ C) $\sec^{-1} 1 = \underline{\hspace{2cm}}$ D) $\csc \frac{4\pi}{9} = \underline{\hspace{2cm}}$

3. State the number of solutions to ΔABC

- A) $\angle A = 42^\circ, a = 12.9, b = 8.7$ 3.
 B) $\angle A = 63^\circ, b = 18, a = 17$ B)

4. State the number of solution to ΔABC
 $C = 71^\circ, a = 5.3, b = 4.1$

4.

5. Solve ABC Given: $B = 90^\circ, \angle A = 34^\circ, c = 11$

5. $\angle C = \underline{\hspace{2cm}}$
 $a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$

6. If $a = 4, b = 6, c = 7$ Find $\angle A$ of triangle ABC

6. $A = \underline{\hspace{2cm}}$

7. Find the Area of the triangle ABC if $a=6, b=4,$ and $c=5$

7.

8. Find the Area of the triangle ABC if $b = 10.9, \angle A = 46^\circ 21', \angle B = 62^\circ 38'$

8.

9. Find the area of the circular segment if the angle is 14.1° and the radius is 7.2

9.

10. Find the linear velocity in meters/sec. A pulley turns at 7 revolutions /sec and the radius is 12 cm.

10.

PCH Ch 4 Review

DIRECTIONS:
Work Problems on
Lined Paper. Staple ditto
to front

Row # _____
Name _____
Period _____

Solve for x - Find all values for x:

1. $\tan x = 0$

2. $\sin x = -1$

3. $\cos x = \frac{\sqrt{2}}{2}$

Graph:

4. $y = -\sin x + \pi$

5. $y = \tan x$

Tell the following information
about each graph:

Amplitude Period and Phase Shift:

6. $y = 3 \cos 4\theta$

7. $y = -110 \sin(15\theta - 40^\circ)$

8. $y = 10 \sin(\pi - x)$

Graph:

9. $y = 3 \cos \frac{\theta}{2}$

10. $y = \tan(2x - \frac{\pi}{4})$

11. $y = 2 \cos x - x$

Solve:

12. $\sin(\cos^{-1} \frac{\sqrt{3}}{2})$

13. $\tan(\cos^{-1} \frac{5}{13})$

14. $\cos(\tan^{-1} \sqrt{3} + \cot^{-1} \sqrt{3})$

Solve:

15. $\cos(\cos^{-1} \frac{1}{2})$

16. $\cos(\frac{1}{2} \tan^{-1} \frac{3}{4})$

17. $\tan(\pi + \sin^{-1} \frac{2}{3})$

Graph: Don't do these.

18. $y = \text{Arc csc } x$

19. $y = \text{Csc } x$

20. $y = \text{Arc sec } x$

21. $y = \text{Sec } x$

Tell Amplitude, Period
Phase Shift + Frequency:

22. $y = -6 \cos(3t - \frac{\pi}{6})$

Definition of Frequency is
 $\frac{|b|}{2\pi}$

23. $y = 2 \sin(2t + \frac{4\pi}{9})$