Honors Pre-Calculus   Name_____

Trigonometry Test 1 Review   Date_____ Period____

Find a positive and a negative coterminal angle for each given angle.

1) 705°   2) −230°

3) $\dfrac{49\pi}{45}$ 4) $-\dfrac{\pi}{2}$

Find a coterminal angle between 0 and 2π for each given angle.

5) $\dfrac{35\pi}{12}$ 6) $\dfrac{37\pi}{12}$

Convert each degree measure into radians and each radian measure into degrees.

7) 45°   8) $-\dfrac{41\pi}{36}$

Find the length of each arc.

9) $r = 17$ yd, $\theta = \dfrac{\pi}{3}$ 10) $r = 18$ in, $\theta = \dfrac{3\pi}{2}$

11) $r = 13$ mi, $\theta = 240°$ 12) $r = 16$ cm, $\theta = 315°$

Find the exact value of each trigonometric function.

13) $\sec 30°$ 14) $\csc -330°$

15) $\sin -\dfrac{3\pi}{4}$ 16) $\sin \dfrac{5\pi}{6}$

17) $\cos 0$

18) $\tan -\dfrac{25\pi}{6}$
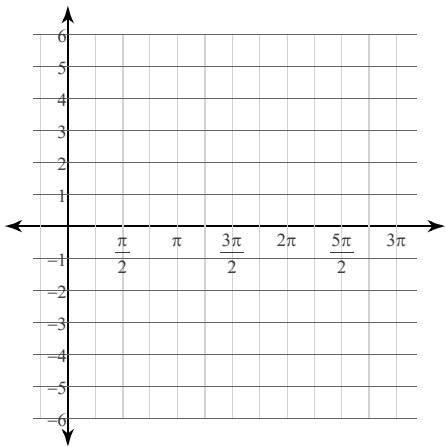
19) $\cot -780°$
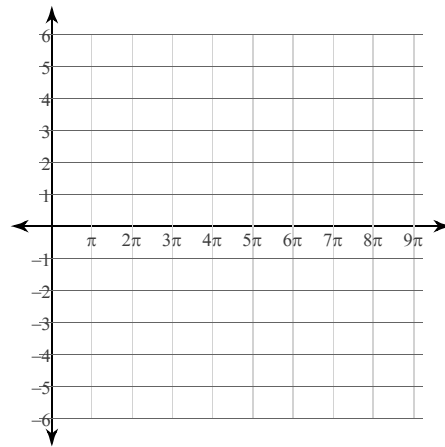
20) $\cot 0$

21) $\csc -\dfrac{7\pi}{2}$

22) $\cos -\dfrac{17\pi}{3}$

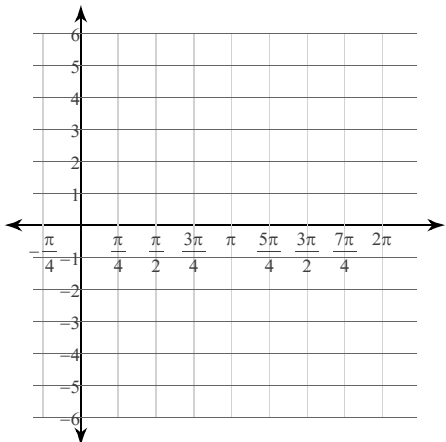**Graph each function using radians. State the Amplitude, Period, Phase Shift, and Vertical Shift.**
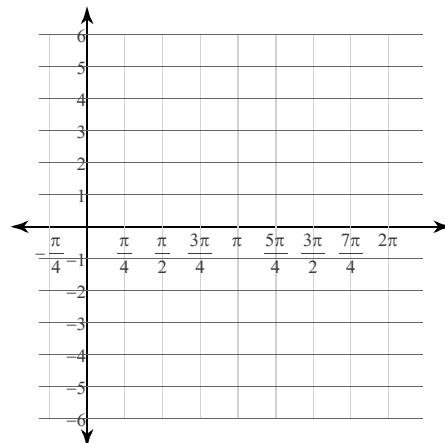
23) $y = 4\sin\left(\theta - \dfrac{\pi}{2}\right)$

24) $y = 1 + 3\sin\left(\dfrac{\theta}{3} + \dfrac{\pi}{3}\right)$

25) $y = -1 + 2\cos 4\theta$

26) $y = 3\cos\left(3\theta - \dfrac{\pi}{2}\right) + 1$

Name_____

Trigonometry Test 1 Review

Date_____ Period____

Find a positive and a negative coterminal angle for each given angle.

1) 705°

345° and −15°

2) −230°

130° and −590°

3) $\dfrac{49\pi}{45}$

$\dfrac{139\pi}{45}$ and $-\dfrac{41\pi}{45}$

4) $-\dfrac{\pi}{2}$

$\dfrac{3\pi}{2}$ and $-\dfrac{5\pi}{2}$

Find a coterminal angle between 0 and 2π for each given angle.

5) $\dfrac{35\pi}{12}$

$\dfrac{11\pi}{12}$

6) $\dfrac{37\pi}{12}$

$\dfrac{13\pi}{12}$

Convert each degree measure into radians and each radian measure into degrees.

7) 45°

$\dfrac{\pi}{4}$

8) $-\dfrac{41\pi}{36}$

-205°

Find the length of each arc.

9) $r = 17$ yd, $\theta = \dfrac{\pi}{3}$

$\dfrac{17\pi}{3}$ yd

10) $r = 18$ in, $\theta = \dfrac{3\pi}{2}$

27π in

11) $r = 13$ mi, $\theta = 240°$

$\dfrac{52\pi}{3}$ mi

12) $r = 16$ cm, $\theta = 315°$

28π cm

Find the exact value of each trigonometric function.

13) sec 30°

$\dfrac{2\sqrt{3}}{3}$

14) csc −330°

2

15) $\sin -\dfrac{3\pi}{4}$

$-\dfrac{\sqrt{2}}{2}$

16) $\sin \dfrac{5\pi}{6}$

$\dfrac{1}{2}$

-1-

17) $\cos 0$

1

18) $\tan -\dfrac{25\pi}{6}$

$-\dfrac{\sqrt{3}}{3}$

19) $\cot -780°$

$-\dfrac{\sqrt{3}}{3}$

20) $\cot 0$

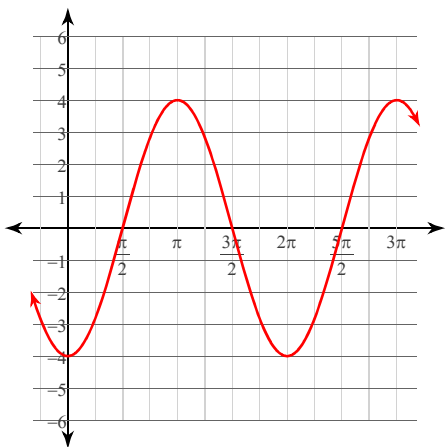Undefined

21) $\csc -\dfrac{7\pi}{2}$
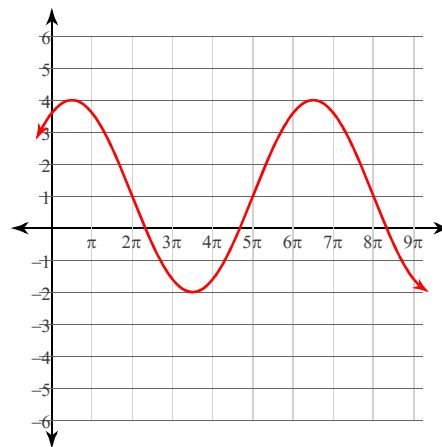
1

22) $\cos -\dfrac{17\pi}{3}$

$\dfrac{1}{2}$

Graph each function using radians. State the Amplitude, Period, Phase Shift, and Vertical Shift.
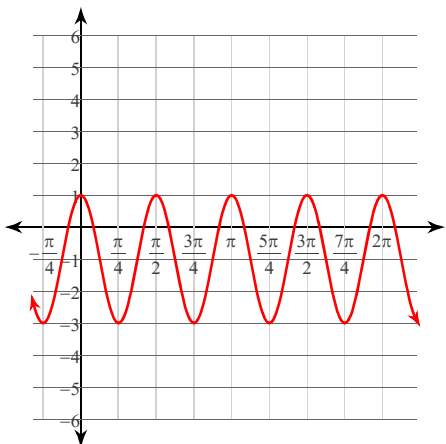
23) $y = 4\sin\left(\theta - \dfrac{\pi}{2}\right)$

24) $y = 1 + 3\sin\left(\dfrac{\theta}{3} + \dfrac{\pi}{3}\right)$

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