Pre-Calculus Name_____ ID: 1

Unit 1 Trig Review

Date_____ Period____

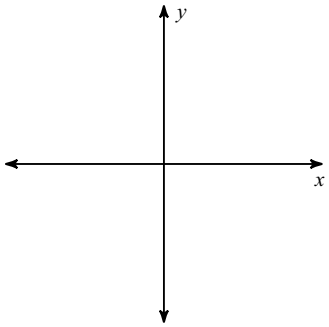
State the quadrant in which the terminal side of each angle lies.

1) $-689°$

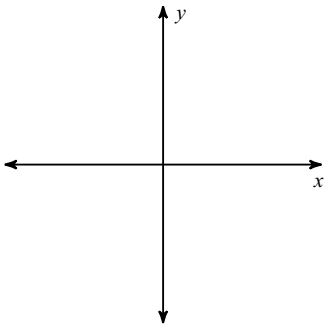
2) $\frac{31\pi}{12}$

Draw an angle with the given measure in standard position.

3) $-490°$



4) $\frac{11\pi}{9}$



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

5) $335°$

6) $-375°$

7) $\frac{11\pi}{18}$

8) $-\frac{7\pi}{4}$

Convert each decimal degree measure into degrees-minutes-seconds.

9) $-285.6725°$

10) $344.4575°$

Convert each degrees-minutes-seconds into decimal degrees.

11) 327° 58' 12"

12) 350° 25' 39"

Convert each degree measure into radians.

13) $340°$

14) $510°$

Convert each radian measure into degrees.

15) $\frac{11\pi}{12}$

16) $\frac{19\pi}{18}$

Find the exact value of each trigonometric function.

17) $\tan -\frac{10\pi}{3}$

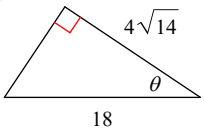
18) $\sin -45°$

19) $\sec \frac{35\pi}{6}$

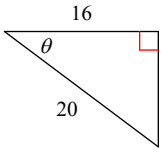
20) $\cos -750°$

Find the value of the trig function indicated.

21) $\sin \theta$



22) $\tan \theta$



23) Find $\cos \theta$ if $\csc \theta = \frac{17}{8}$

24) Find $\sec \theta$ if $\cot \theta = 1$

Find the length of each arc.

25) $r = 11$ ft, $\theta = \frac{5\pi}{3}$

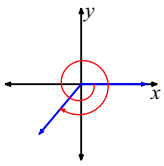
26) $r = 8$ m, $\theta = 300°$

Answers to Unit 1 Trig Review (ID: 1)

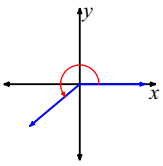
1) I

2) II

3)



4)



5) 695° and –25°

6) 345° and –15°

7) $\frac{47\pi}{18}$ and $-\frac{25\pi}{18}$

8) $\frac{\pi}{4}$ and $-\frac{15\pi}{4}$

9) –285° 40' 21"

10) 344° 27' 27"

11) 327.97°

12) 350.4275°

13) $\frac{17\pi}{9}$

14) $\frac{17\pi}{6}$

15) 165°

16) 190°

17) $-\sqrt{3}$

18) $-\frac{\sqrt{2}}{2}$

19) $\frac{2\sqrt{3}}{3}$

20) $\frac{\sqrt{3}}{2}$

21) $\frac{5}{9}$

22) $\frac{3}{4}$

23) $\frac{15}{17}$

24) $\sqrt{2}$

25) $\frac{55\pi}{3}$ ft

26) $\frac{40\pi}{3}$ m