

Radians and Degrees

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Name _____

Date _____

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

1) -270°

2) $\frac{\pi}{3}$

3) $\frac{7\pi}{9}$

4) $-\frac{61\pi}{18}$

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

6) 135°

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

7) 180°

8) 65°

9) -230°

10) 420°

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

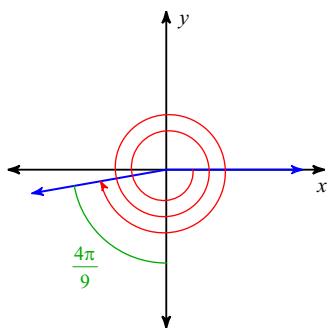
12) $\frac{14\pi}{9}$

13) $-\frac{7\pi}{6}$

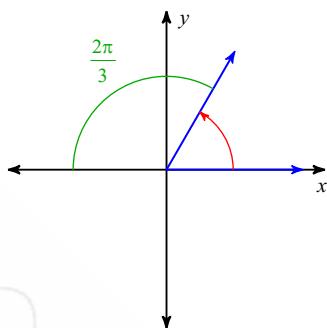
14) $\frac{71\pi}{45}$

Find the measure of each angle.

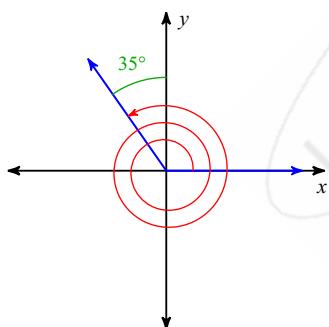
15)



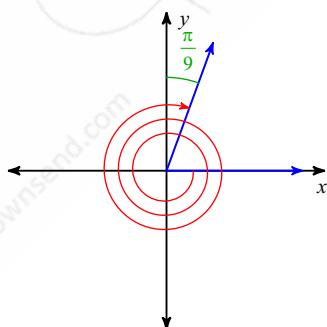
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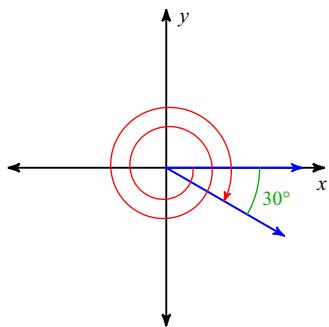
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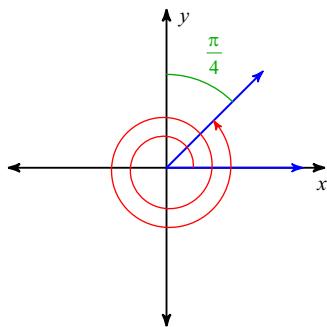
18)



19)



20)



Answers to Radians and Degrees

1) $-\frac{3\pi}{2}$

5) -315°

9) 130° and -590°

13) $\frac{5\pi}{6}$ and $-\frac{19\pi}{6}$

17) 845°

2) 60°

6) $\frac{3\pi}{4}$

10) 60° and -300°

14) $\frac{161\pi}{45}$ and $-\frac{19\pi}{45}$

18) $-\frac{101\pi}{18}$

3) 140°

7) 540° and -180°

11) $\frac{5\pi}{6}$ and $-\frac{7\pi}{6}$

15) $-\frac{89\pi}{18}$

19) -750°

4) -610°

8) 425° and -295°

12) $\frac{32\pi}{9}$ and $-\frac{4\pi}{9}$

16) $\frac{\pi}{3}$

20) $\frac{17\pi}{4}$

