NAME _____ DATE _____ PERIOD ____

13-6

Skills Practice

Circular Functions

The given point P is located on the unit circle. Find $\sin\theta$ and $\cos\theta$.

1. $P\left(\frac{3}{5}, \frac{4}{5}\right)$

$\sin\theta = \frac{4}{5}$

$\cos\theta = \frac{3}{5}$

2. $P\left(\frac{5}{13}, -\frac{12}{13}\right)$

$\sin\theta = -\frac{12}{13}$

$\cos\theta = \frac{5}{13}$

3. $P\left(-\frac{9}{41}, -\frac{40}{41}\right)$

$\sin\theta = -\frac{40}{41}$

$\cos\theta = -\frac{9}{41}$

4. $P(0, 1)$

$\sin\theta = 1$

$\cos\theta = 0$

5. $P(-1, 0)$

$\sin\theta = 0$

$\cos\theta = -1$

6. $P\left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$

$\sin\theta = -\frac{\sqrt{3}}{2}$ $\cos\theta = \frac{1}{2}$

Find the exact value of each function.

7. $\cos 45°$ $\frac{\sqrt{2}}{2}$

8. $\sin 210°$ $-\frac{1}{2}$

9. $\sin 330°$ $-\frac{1}{2}$

10. $\cos 330°$ $\frac{\sqrt{3}}{2}$

11. $\cos(-60°)$ $\frac{1}{2}$

12. $\sin(-390°)$ $-\frac{1}{2}$

13. $\sin 5\pi$ 0

14. $\cos 3\pi$ -1

15. $\sin\frac{5\pi}{2}$ 1

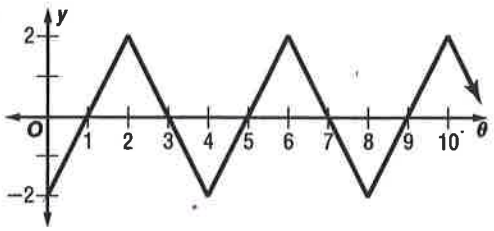
16. $\sin\frac{7\pi}{3}$ $\frac{\sqrt{3}}{2}$

17. $\cos\left(-\frac{7\pi}{3}\right)$ $\frac{1}{2}$

18. $\cos\left(-\frac{5\pi}{6}\right)$ $-\frac{\sqrt{3}}{2}$

Determine the period of each function.

19.



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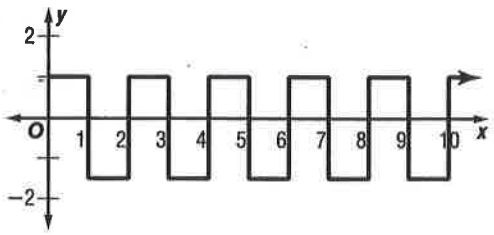

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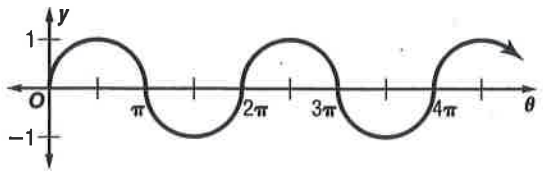

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