NAME _____ DATE _____ PERIOD _____

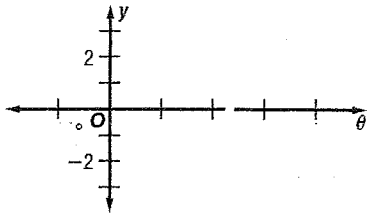
14-2 Study Guide and Intervention

Translations of Trigonometric Graphs

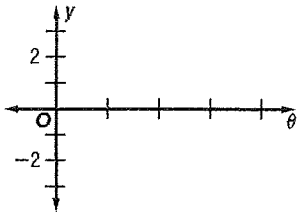
Exercises

State the amplitude, period, and phase shift for each function. Then graph the function.

1. $y = 2 \sin (\theta + 60°)$

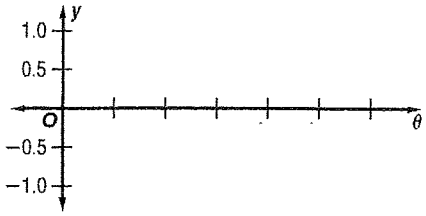


2. $y = \tan \left(\theta - \frac{\pi}{2}\right)$



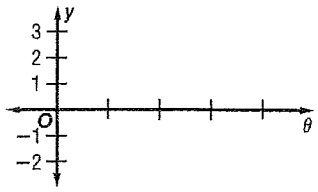
3. $y = 3 \cos (\theta - 45°)$

4. $y = \frac{1}{2} \sin 3\left(\theta - \frac{\pi}{3}\right)$

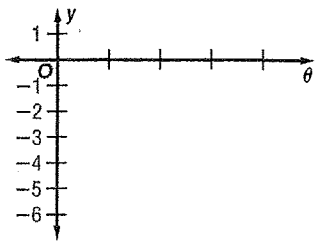


State the vertical shift, equation of the midline, amplitude, and period for each function. Then graph the function.

5. $y = \frac{1}{2} \cos \theta + 2$



6. $y = 3 \sin \theta - 2$



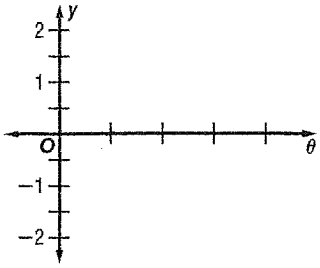
NAME _____ DATE _____ PERIOD _____

14-2 Skills Practice

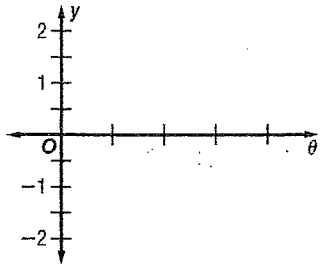
Translations of Trigonometric Graphs

State the vertical shift, amplitude, period, and phase shift of each function. Then graph the function.

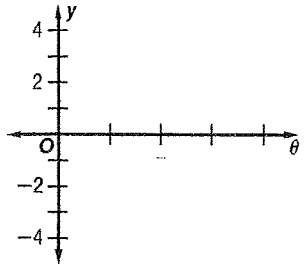
1. $y = \sin(\theta + 90°)$



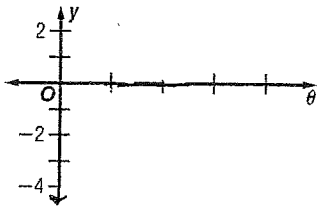
2. $y = \cos(\theta - 45°)$



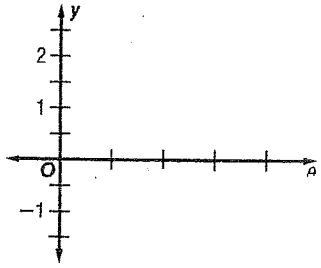
3. $y = \tan\left(\theta - \frac{\pi}{2}\right)$



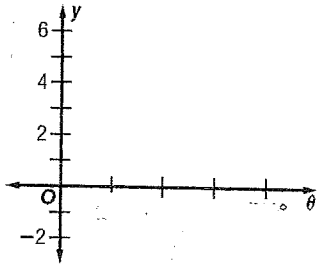
4. $y = -\sin\left[\frac{1}{4}\left(\theta - \frac{\pi}{2}\right)\right]$



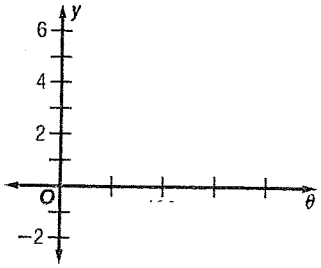
5. $y = \cos\theta + 1$



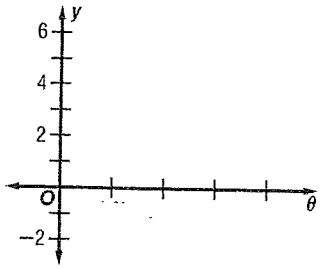
6. $y = 2\cos(\theta + 30°) + 3$



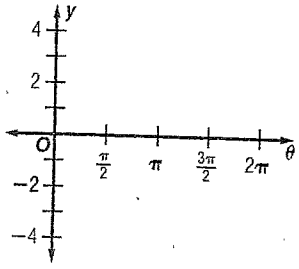
7. $y = 2\cos[3(\theta + 45°)] + 2$



8. $y = 3\sin[2(\theta - 90°)] + 2$

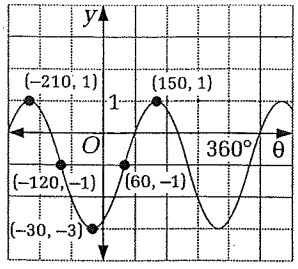


9. $y = \frac{1}{2}\tan\left(\theta - \frac{\pi}{2}\right)$



Write an equation for each graph. (sine + cosine)

10.



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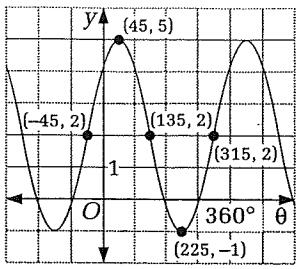

Lesson 14-2