Avoiding Horizontal Reflections Name _____

Rewrite each equation so that the argument is positive. State the amplitude, period, phase shift and vertical shift of each of the following functions. Then graph one complete period of each function, labeling the horizontal axis and vertical axis. Also state the domain and range of one period using interval notation. ** Remember: ***θ → degrees*** and **x → *radians***. **

1. $y = \cos\left(-\frac{2}{3}x\right)$

2. $y = -2\sin\left(-\frac{1}{5}x\right)$

3. $y = \sin(-4\theta)$

4. $f(x) = -4\cos\left(-\frac{2x}{3}\right)$

5. $y = -\frac{1}{2}\sin(-3\theta)$

6. $y = \cos(-x + \pi)$

7. $y = 1 + 3\cos(-\frac{\pi}{2}x)$

8. $y = 3 + \sin\left(-\frac{1}{2}x - \frac{\pi}{6}\right)$

9. $y = 4\cos\left(-6\theta + 420^0\right) - 2$

10. $y = 4\sin(-3\theta - 99^o) - 1$