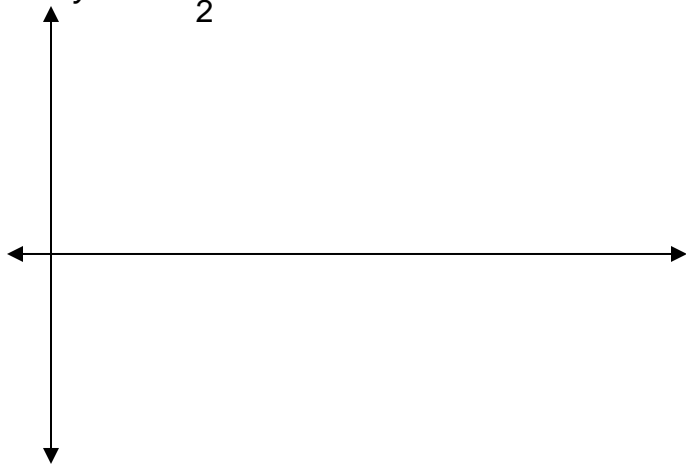


Trigonometric Graphs #1 (7.7a)
Graphs of Sine, Cosine, and Tangent
Without Shifts

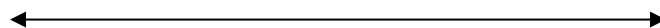
Determine the amplitude and period or critical points. Then graph two periods of the function.

1. $y = -\sin \frac{\pi}{2}x$



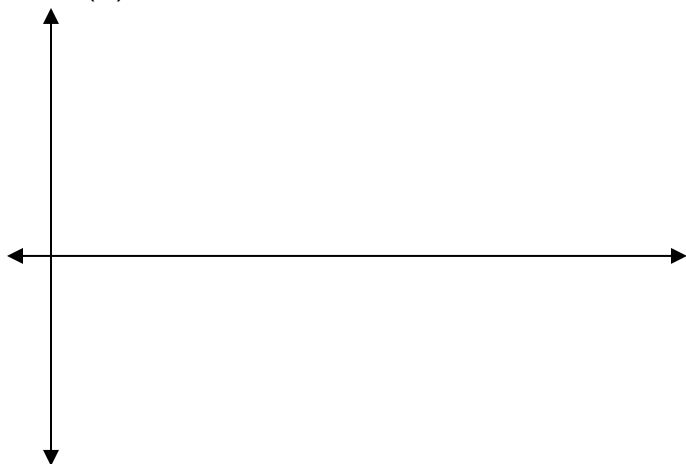
Amplitude: _____ Period: _____

2. $f(x) = 3 \tan 2x$



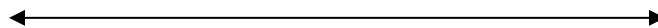
Critical Point: _____ Period: _____

3. $f(x) = \cos 2x$



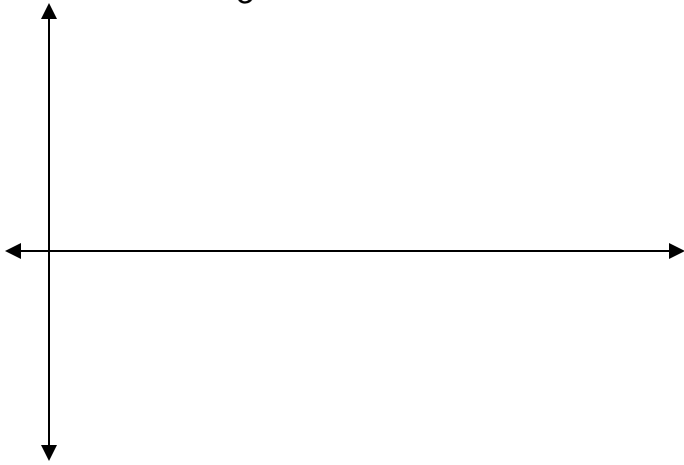
Amplitude: _____ Period: _____

4. $y = -\tan \pi x$



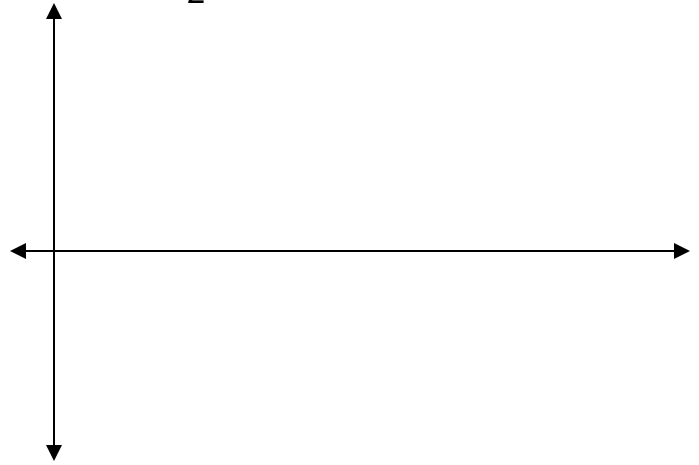
Critical Point: _____ Period: _____

5. $f(x) = -2\cos\frac{\pi}{3}x$



Amplitude: _____ Period: _____

6. $y = \sin\frac{3}{2}x$



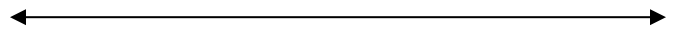
Amplitude: _____ Period: _____

7. $y = \frac{1}{2}\cos\pi x$



Amplitude: _____ Period: _____

8. $y = \frac{2}{3}\tan\frac{x}{2}$



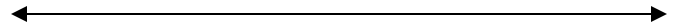
Critical Point: _____ Period: _____

9. $f(x) = 3\sin\frac{\pi}{2}x$



Amplitude: _____ Period: _____

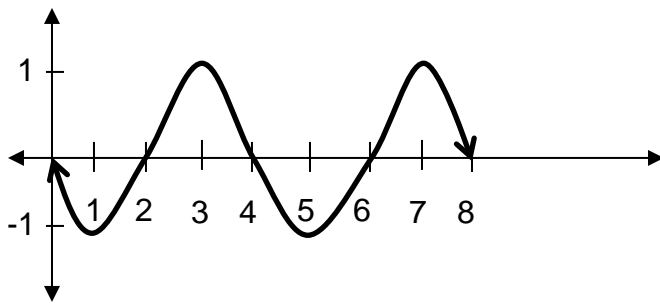
10. $f(x) = -2\tan 2\pi x$



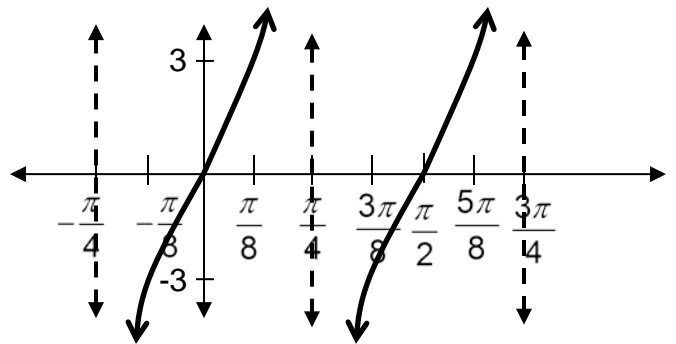
Critical Point: _____ Period: _____

ANSWERS

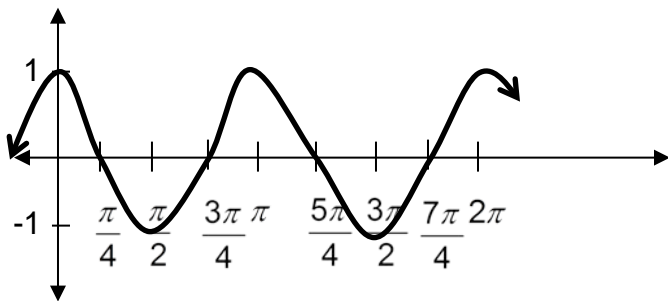
1. amp: 1 period: 4



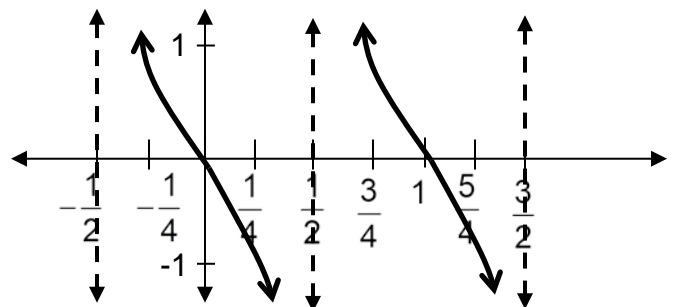
2. critical point: -3, 3 period: $\frac{\pi}{2}$



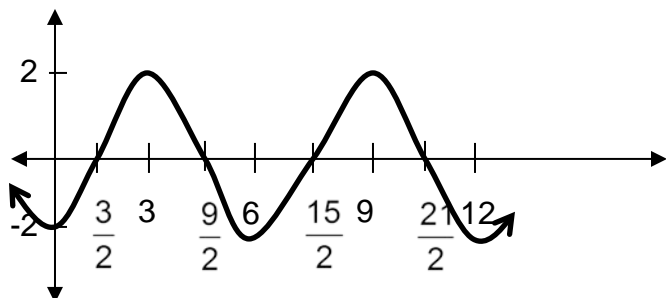
3. amp: 1 period: π



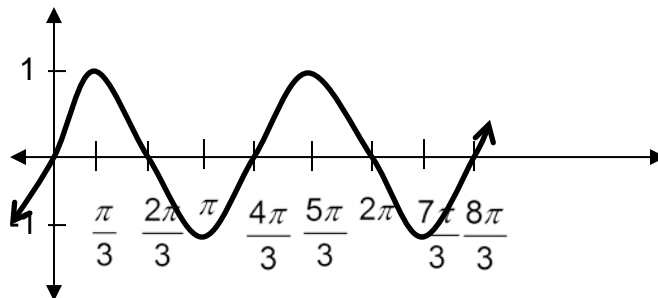
4. critical point: -1, 1 period: 1



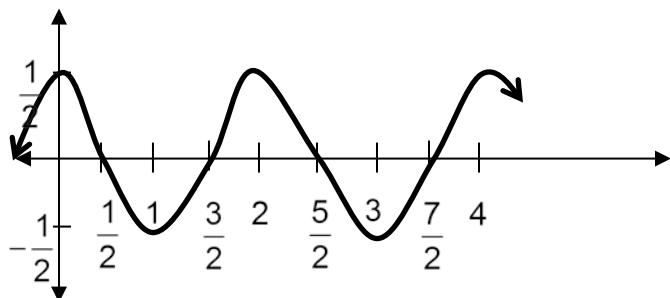
5. amp: 2 period: 6



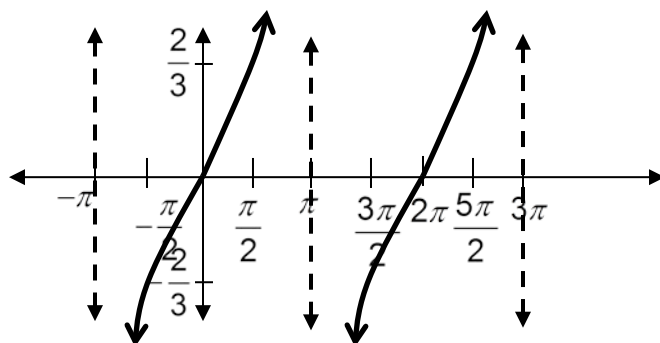
6. amp: 1 period: $\frac{4\pi}{3}$



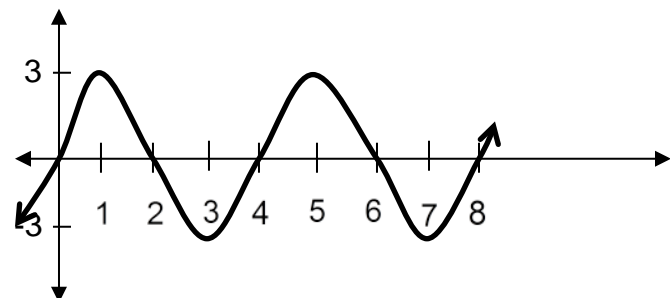
7. amp: $\frac{1}{2}$ period: 2



8. critical point: $-\frac{2}{3}, \frac{2}{3}$ period: 2π



9. amp: 3 period: 4



10. critical point: -2, 2 period: $\frac{1}{2}$

