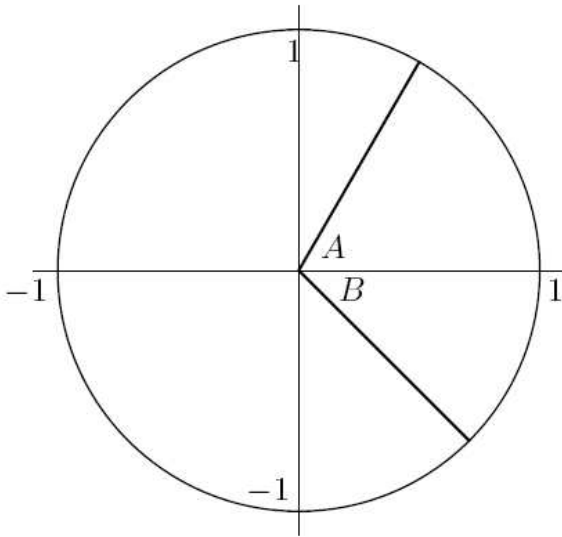


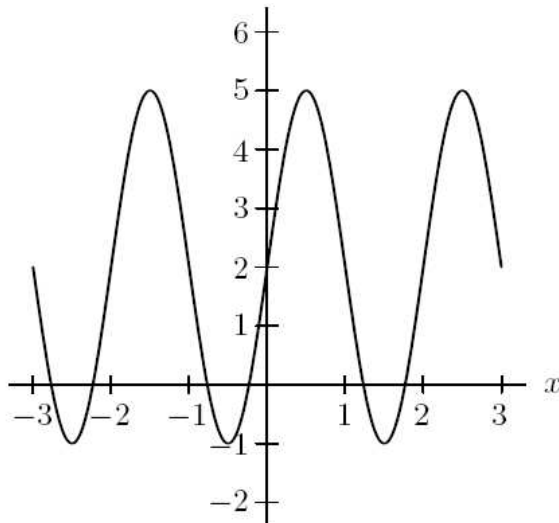
Classroom Voting Questions: Precalculus

1.5 Trigonometric Functions

1. Which of the following is the approximate value for the sine and cosine of angles A and B in the figure below.

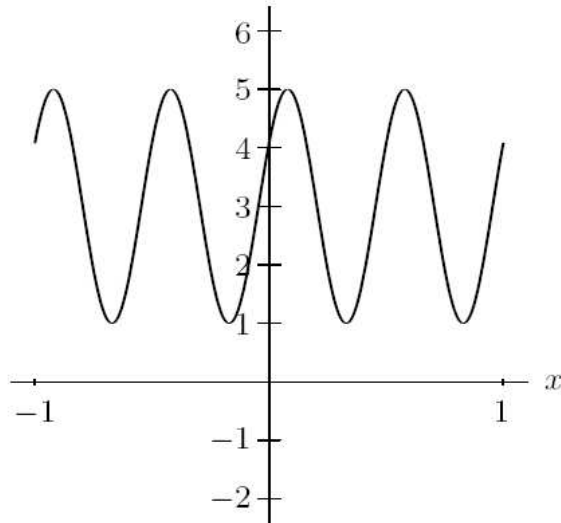


- (a) $\sin A \approx 0.5$, $\cos A \approx 0.85$, $\sin B \approx -0.7$, $\cos B \approx 0.7$
(b) $\sin A \approx 0.85$, $\cos A \approx 0.5$, $\sin B \approx -0.7$, $\cos B \approx 0.7$
(c) $\sin A \approx 0.5$, $\cos A \approx 0.85$, $\sin B \approx 0.7$, $\cos B \approx 0.7$
(d) $\sin A \approx 0.85$, $\cos A \approx 0.5$, $\sin B \approx 0.7$, $\cos B \approx 0.7$
2. The amplitude and period of the function below are



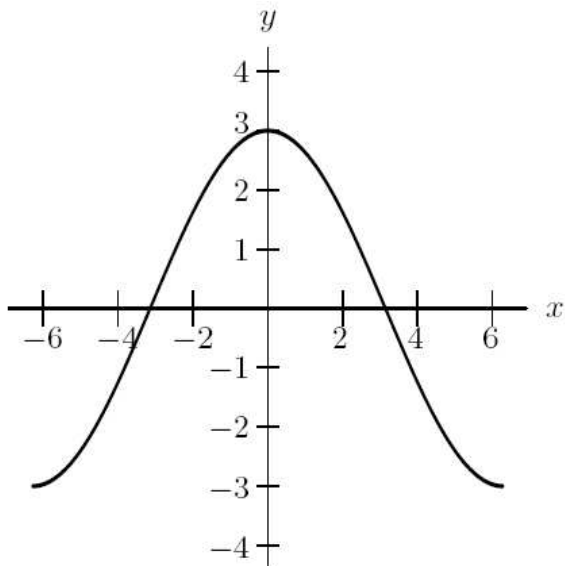
- (a) Amplitude = 2, Period = 2
- (b) Amplitude = 2, Period = 3
- (c) Amplitude = 2, Period = 1/2
- (d) Amplitude = 3, Period = 2
- (e) Amplitude = 3, Period = 1/2

3. The amplitude and period of the function below are



- (a) Amplitude = 2, Period = 2
- (b) Amplitude = 2, Period = 3
- (c) Amplitude = 2, Period = 1/2
- (d) Amplitude = 3, Period = 2
- (e) Amplitude = 3, Period = 1/2

4. Which of the following could describe the graph below?

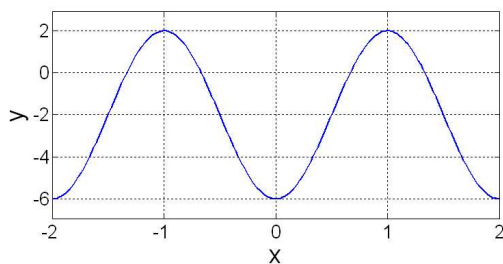


- (a) $y = 3 \cos(2x)$
- (b) $y = 3 \cos(x/2)$
- (c) $y = 3 \sin(2x)$
- (d) $y = 3 \sin(x/2)$

5. The function $f(x) = 3 \sin(2x+4)$ is created when you take the function $g(x) = 3 \sin(2x)$ and you...

- (a) shift it left by 4 units.
- (b) shift it right by 4 units.
- (c) shift it left by 2 units.
- (d) shift it right by 2 units.
- (e) shift it left by 8 units.

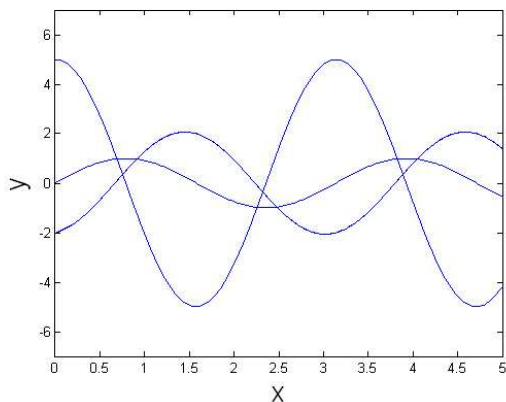
6. Which of the following could describe the graph below?



- (a) $y = 4 \sin\left(\pi x - \frac{\pi}{2}\right) - 2$

- (b) $y = -4 \sin\left(\pi x + \frac{\pi}{2}\right) - 2$
- (c) $y = -4 \cos(\pi x) - 2$
- (d) $y = 4 \cos(\pi(x + 1)) - 2$
- (e) All of the above
- (f) More than one, but not all of the above

7. Three different functions of the form $y = A \sin(Bx + C)$ are plotted below. Could these all have the same value of B ?



- (a) Yes
 - (b) No
 - (c) Not enough information is given.
8. The functions plotted below are all of the form $y = A \sin(Bx + C)$. Which function has the largest value of B ?

