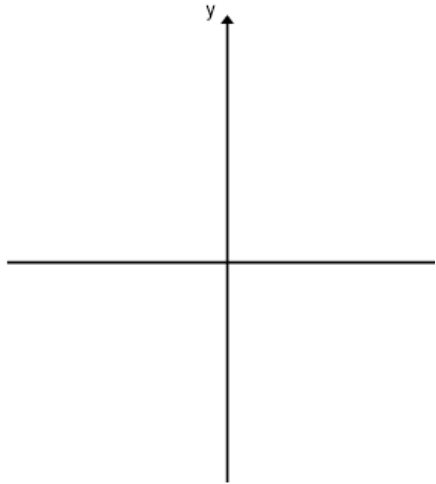


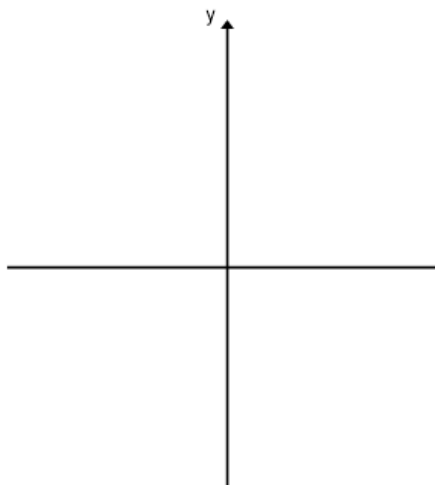
Sketch a quick graph of the given model over TWO periods (label extremes and x intercepts)



**Given Model**  $f(x) = 16\sin\left(\frac{2\pi}{20}x\right)$

1. What is the period length of this model? \_\_\_\_\_
2. What is the amplitude of this model? \_\_\_\_\_
3. What are the first two POSITIVE solutions the given equation?  $-11 = 16\sin\left(\frac{2\pi}{20}x\right)$
4. What are ALL of the solutions to the given equation?
5. What are the solutions to this equation over  $x \in [45, 65]$

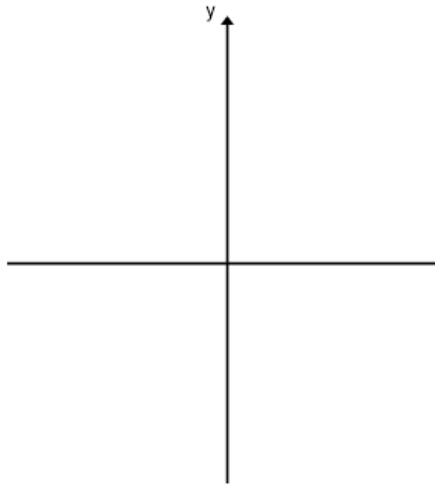
Sketch a quick graph of the given model over TWO periods (label extremes and x intercepts)



**Given Model**  $f(x) = -20\sin\left(\frac{2\pi}{16}x\right)$

1. What is the period length of this model? \_\_\_\_\_
2. What is the amplitude of this model? \_\_\_\_\_
3. What are the first two POSITIVE solutions the given equation?  $18 = -20\sin\left(\frac{2\pi}{16}x\right)$
4. What are ALL of the solutions to the given equation?
5. What are the solutions to this equation over  $x \in [34, 52]$

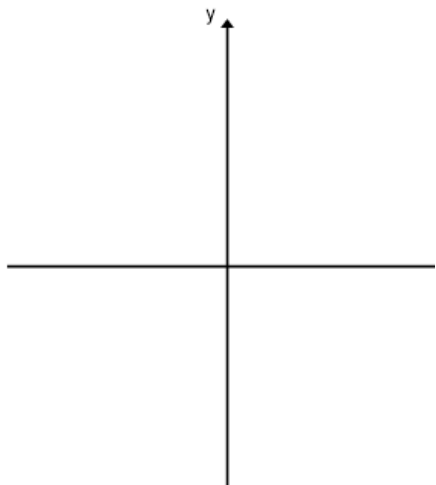
Sketch a quick graph of the given model over TWO periods (label extremes and x intercepts)



**Given Model**  $f(x) = \frac{5}{16} \cos(12\pi x)$

1. What is the period length of this model? \_\_\_\_\_
2. What is the amplitude of this model? \_\_\_\_\_
3. What are the first two POSITIVE solutions the given equation?  $0.2 = \frac{5}{16} \cos(12\pi x)$
4. What are ALL of the solutions to the given equation?
5. What are the solutions to this equation over  $x \in [0, \frac{1}{2}]$

Sketch a quick graph of the given model over TWO periods (label extremes and x intercepts)



**Given Model**  $f(x) = \frac{-5}{8} \cos(24\pi x)$

1. What is the period length of this model? \_\_\_\_\_
2. What is the amplitude of this model? \_\_\_\_\_
3. What are the first two POSITIVE solutions the given equation?  
 $0.2 = \frac{-5}{8} \cos(24\pi x)$
4. What are ALL of the solutions to the given equation?
5. What are the solutions to this equation over  $x \in [0, \frac{1}{2}]$