

Name:

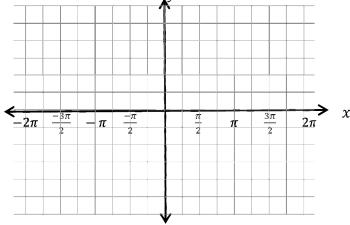
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Assignment 8A.1: Graphing Sinusoids-Sine

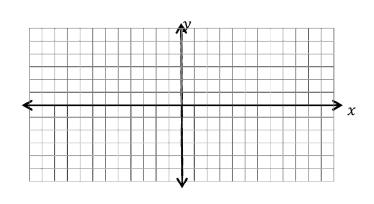
Answer the following questions and show your work to justify your solutions.

1. Graph $f(x) = 2\sin(x)$ from -2π to 2π

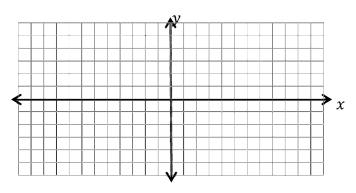


For each of the following functions, find the amplitude and period, then graph at least 2 periods of each (adjust your scale accordingly and label your axes)

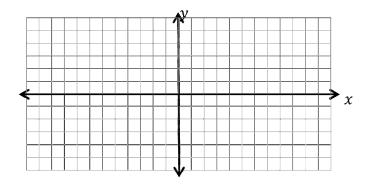
$$2. g(x) = -\sin(x) + 1$$



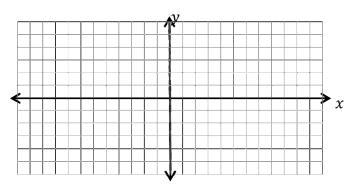
$$3. h(x) = 2\sin\left(x + \frac{\pi}{4}\right)$$



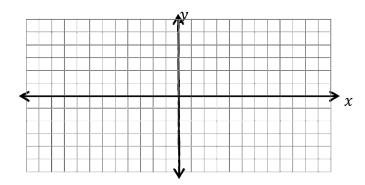
$$4. \qquad f(x) = \sin(x - \pi) - 1$$



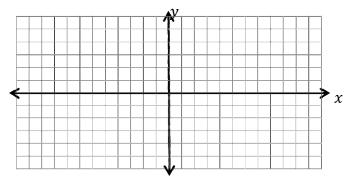
5.
$$f(x) = \sin(x + 2\pi) + 2$$



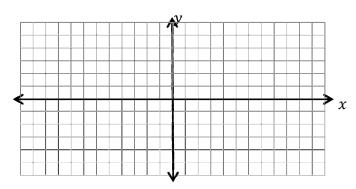
 $6. k(x) = \sin(2x)$



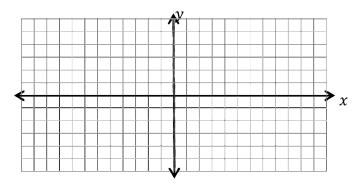
 $7. m(x) = \sin\left(\frac{1}{2}x\right)$



 $8. \qquad f(x) = 3\sin(2(x+1))$



9. $g(x) = -\frac{1}{2}\sin(\pi x) + 1$



10. The curve below is the graph of a sinusoidal function. It goes through the points (-8,0) and (2,0). Find a sinusoidal function that matches the given graph.

