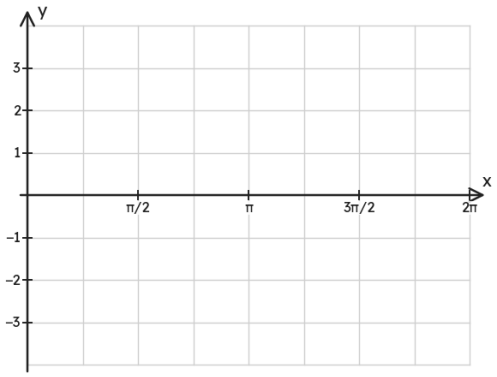
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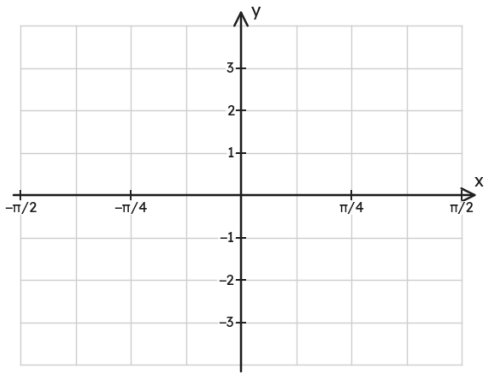
Graphing Trig Functions - Medium

Graph each function on the grid and give the amplitude and period (and asymptotes for tangent), or write the function shown by the graph.

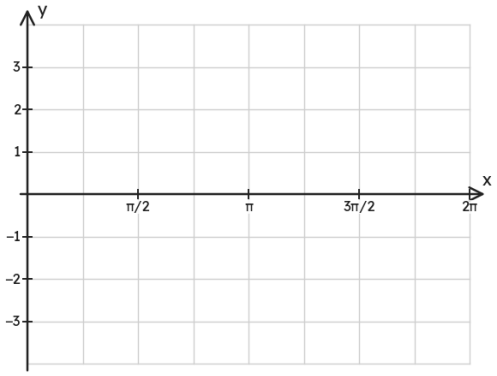
1. Graph y = 2 cos 2x + 1.



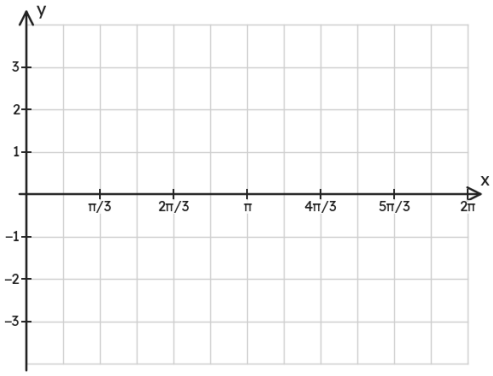
2. Graph y = 2 tan 2x.



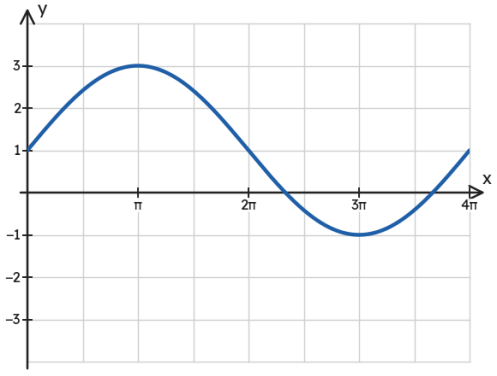
3. Graph y = −sin x.



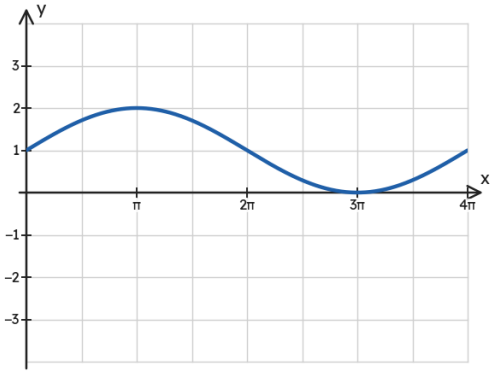
4. Graph y = −sin 3x + 1.



5. Write a sine function for the graph.



6. Write a sine function for the graph.

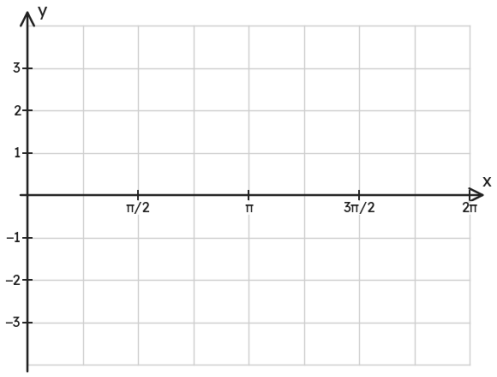


Name: _____ Date: _____

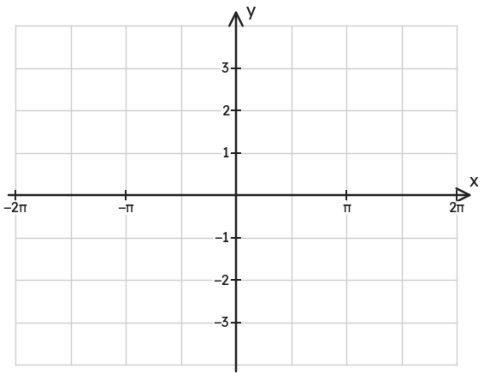
Graphing Trig Functions - Medium

Graph each function on the grid and give the amplitude and period (and asymptotes for tangent), or write the function shown by the graph.

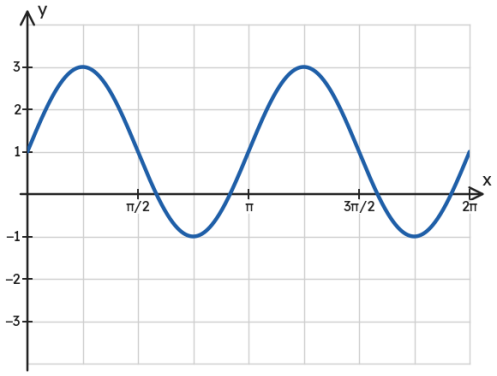
7. Graph y = 2 sin x + 1.



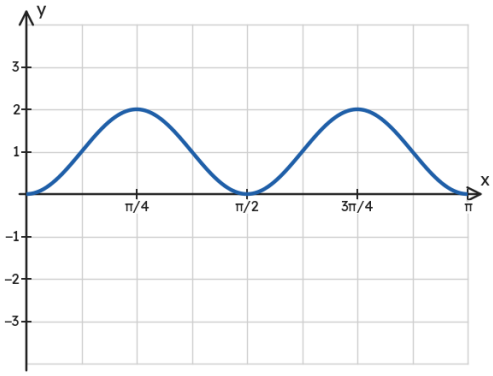
8. Graph y = 3 tan(x/2).



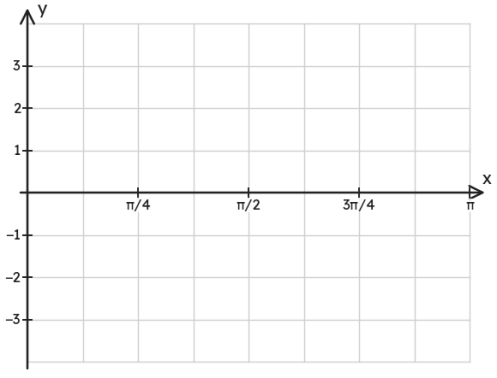
9. Write a sine function for the graph.



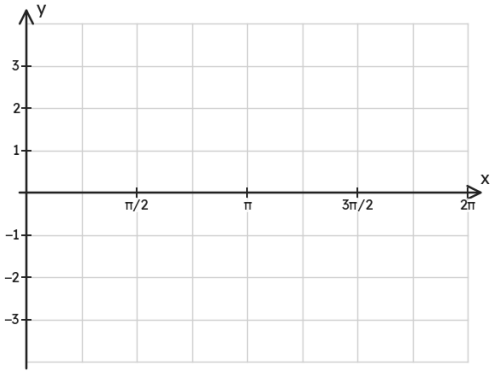
10. Write a cosine function for the graph.



11. Graph y = 3 cos 4x.

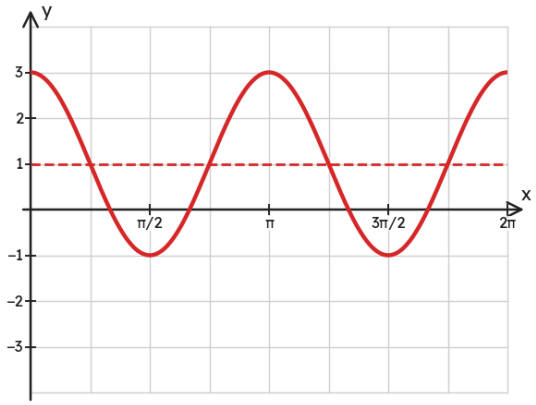


12. Graph y = −cos x.



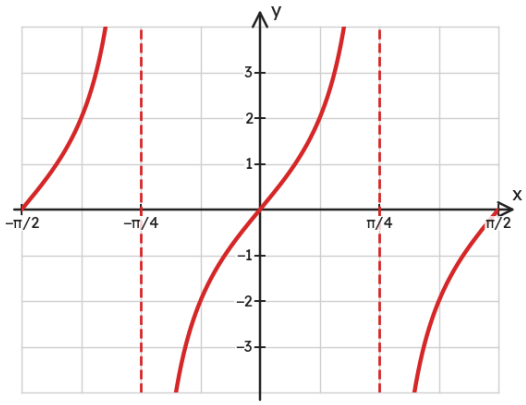
Graphing Trig Functions - Medium - Answer Key

1. Graph $y = 2\cos 2x + 1$.



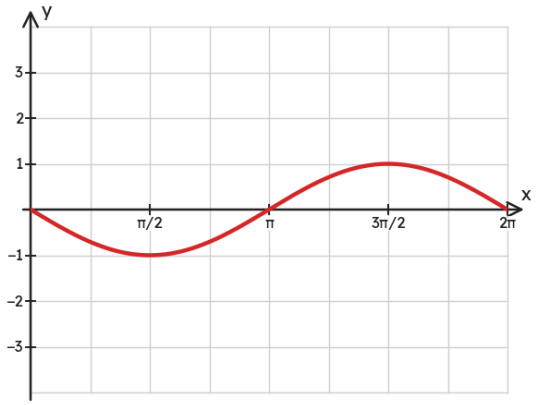
amplitude 2; period π; midline y = 1

2. Graph $y = 2\tan 2x$.



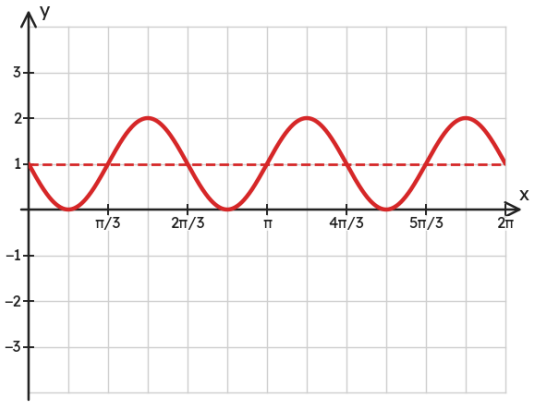
period π/2; asymptotes x = −π/4, π/4

3. Graph $y = -\sin x$.



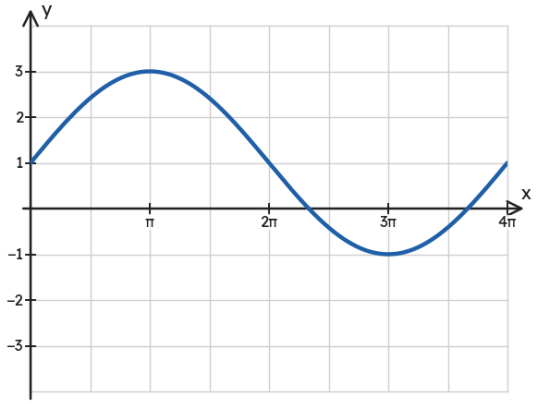
amplitude 1; period 2π

4. Graph $y = -\sin 3x + 1$.



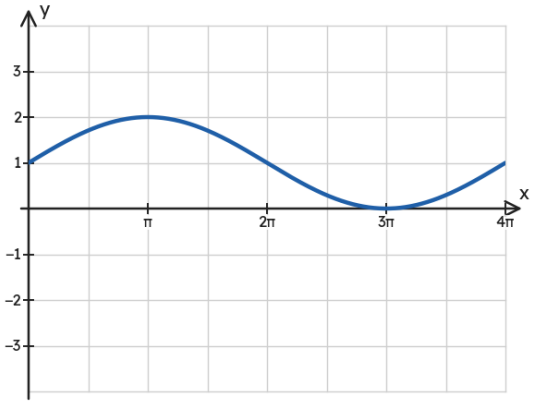
amplitude 1; period 2π/3; midline y = 1

5. Write a sine function for the graph.



$y = 2\sin(x/2) + 1$

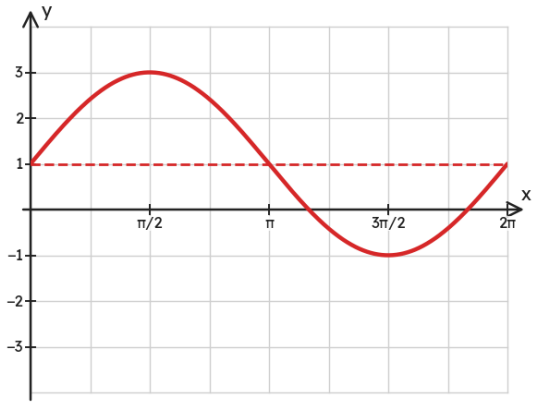
6. Write a sine function for the graph.



$y = \sin(x/2) + 1$

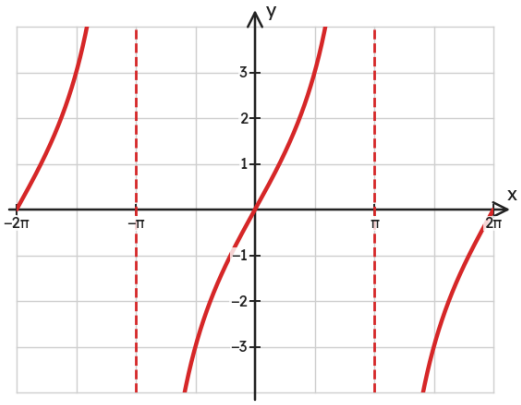
Graphing Trig Functions - Medium - Answer Key

7. Graph y = 2 sin x + 1.



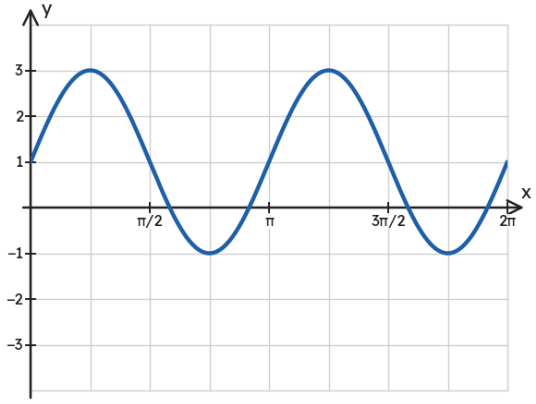
amplitude 2; period 2π; midline y = 1

8. Graph y = 3 tan(x/2).



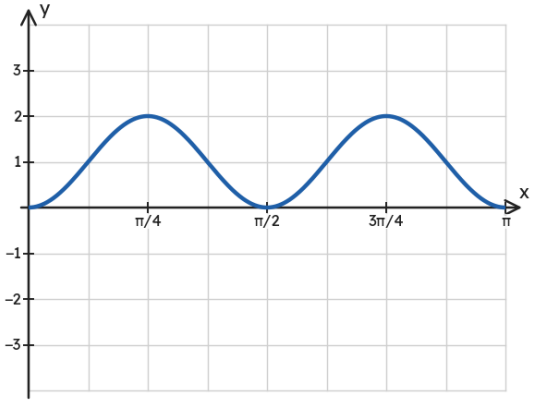
period 2π; asymptotes x = −π, π

9. Write a sine function for the graph.



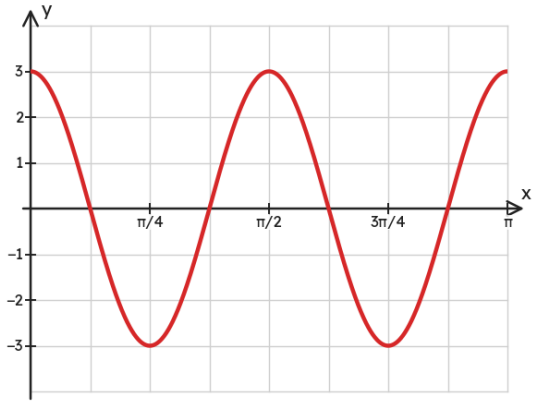
y = 2 sin 2x + 1

10. Write a cosine function for the graph.



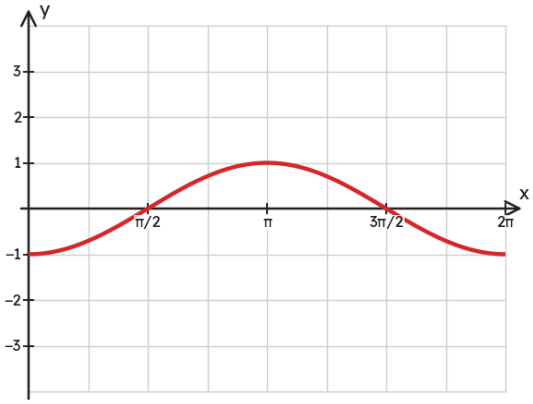
y = −cos 4x + 1

11. Graph y = 3 cos 4x.



amplitude 3; period π/2

12. Graph y = −cos x.



amplitude 1; period 2π