

Name: _____ Date: _____ Per: _____

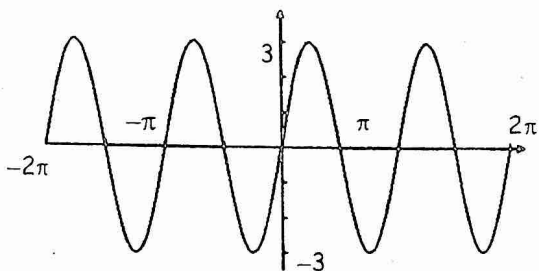
Amplitude and Period for Sine and Cosine Functions Worksheet

Determine the amplitude and period of each function.

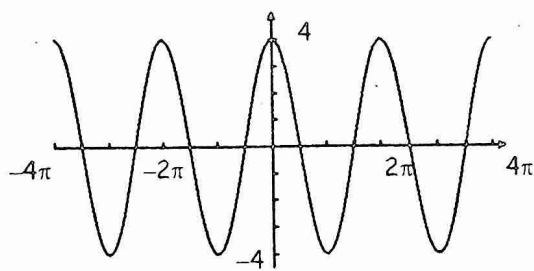
- | | | |
|------------------------------|---------------------|----------------------|
| 1. $y = \sin 4x$ | 2. $y = \cos 5x$ | 3. $y = \sin x$ |
| 4. $y = 4 \cos x$ | 5. $y = -2 \sin x$ | 6. $y = 2 \sin(-4x)$ |
| 7. $y = 3 \sin \frac{2}{3}x$ | 8. $y = -4 \cos 5x$ | 9. $y = 3 \cos(-2x)$ |

Give the amplitude and period of each function graphed below. Then write an equation of each graph.

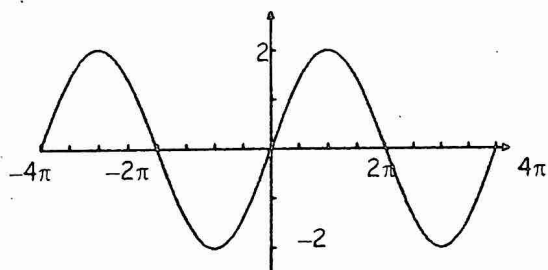
10. _____



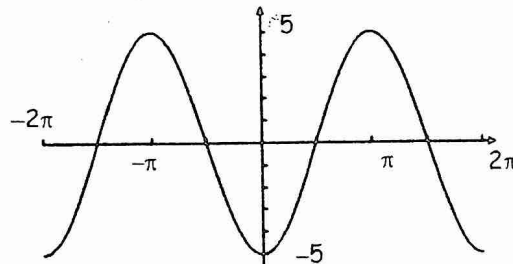
11. _____



12. _____



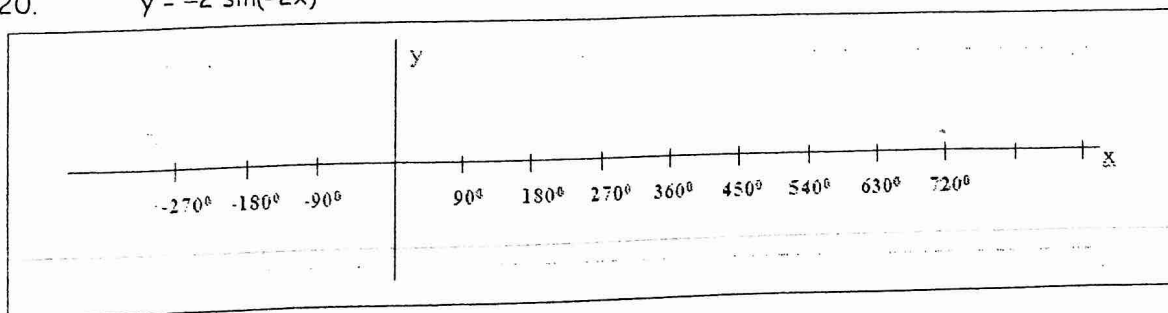
13. _____



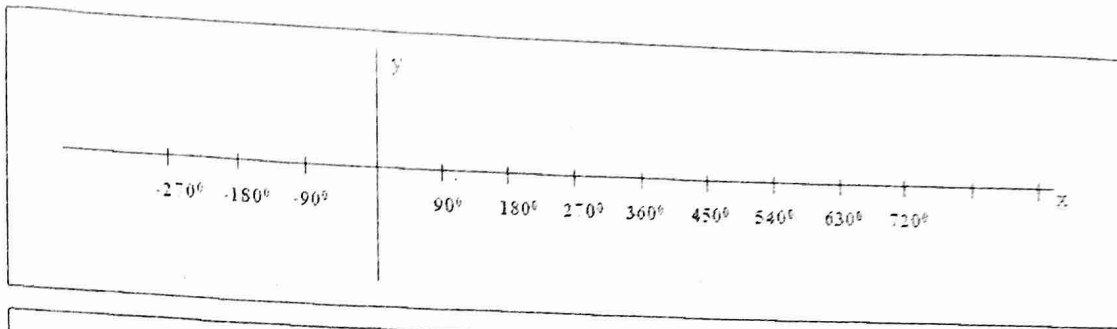
Give the amplitude and period of each function. Then graph of the function over the interval $-2\pi \leq x \leq 2\pi$. Graphs provided. BE as accurate with your graphing as possible. Make sure your zero crossings are correct.

- | | | |
|---------------------|-------------------------------|----------------------|
| 14. $y = 3 \sin x$ | 15. $y = 2 \cos x$ | 16. $y = 3 \sin 2x$ |
| 17. $y = 5 \cos 2x$ | 18. $y = 3 \cos \frac{1}{2}x$ | 19. $y = -\cos(-3x)$ |

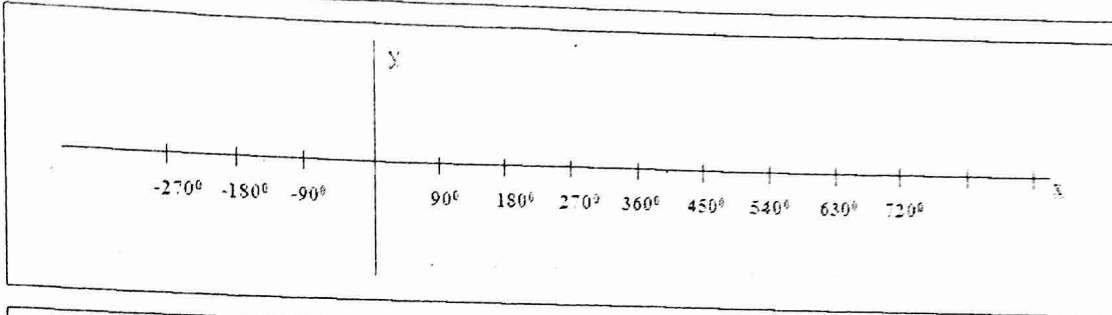
20. $y = -2 \sin(-2x)$



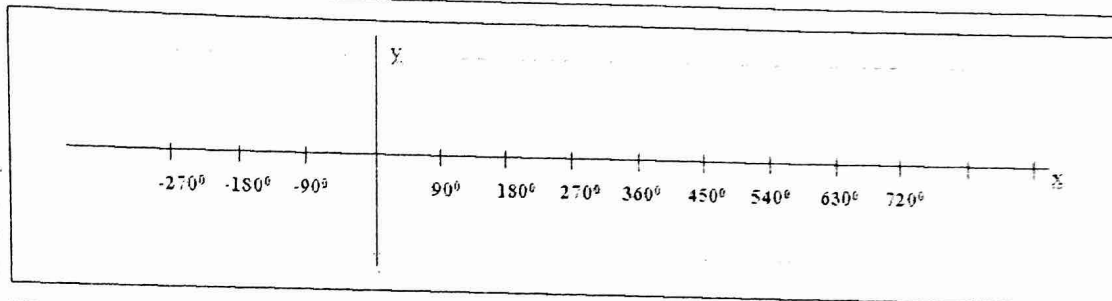
14.
 $y = 3 \sin x$



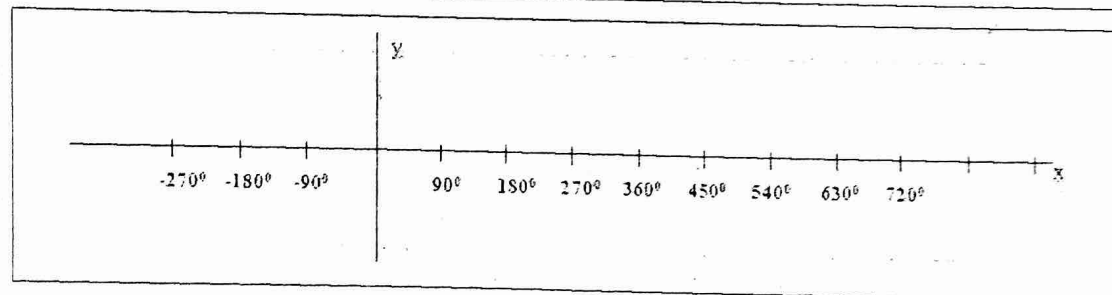
15.
 $y = 2 \cos x + 5$



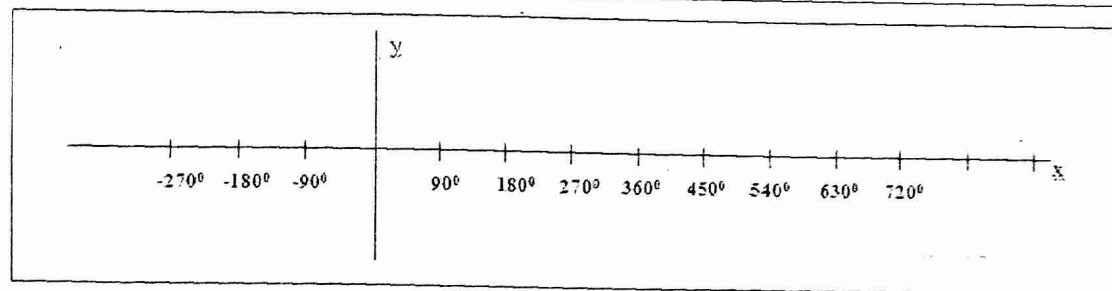
16.
 $y = 3 \sin(2x - 90)$



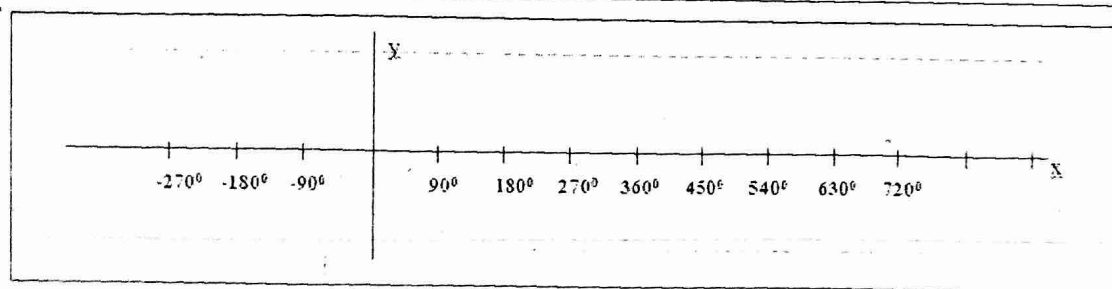
17.
 $y = 5 \cos 2x$



18.
 $y = -\cos(-3x) + 2$



19.
 $y = 3 \cos \frac{1}{2}x$



20.
 $y = -2 \sin(-2x)$