

8. Graphs of Trigonometric functions

Name:	Class:	Date:
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1) Find the corresponding acute angle that can be represented by the following angle [2]

a) -115

b) $\frac{27\pi}{17}$

2) State the quadrant that the following angle lies in [1]

315

3) Without using your calculator, find the value of the following [2]

a) $\cos 540^\circ$

b) $\cos 3\pi$

4) Express the following in terms of a trigonometric function of an acute angle [3]

a) $\sin (-45)$

b) $\tan 350$

c) $\cos \left(-\frac{7\pi}{9} \right)$

5) Find the exact value of the following [3]

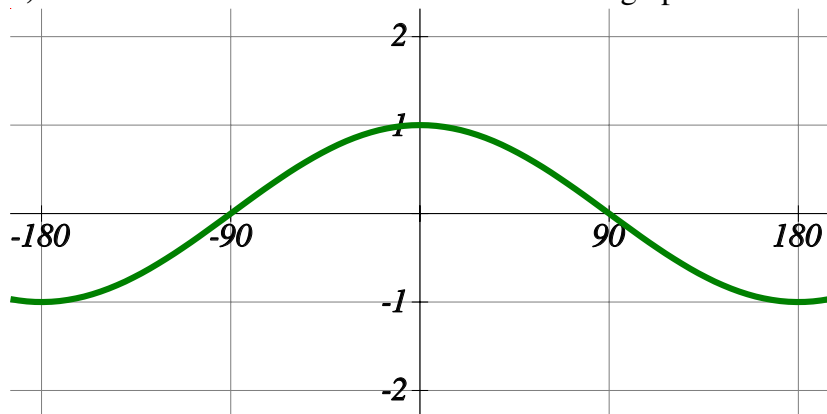
a) $\cos 240^\circ$

b) $\sin (-390)$

c) $\tan \frac{2\pi}{3}$

6) Write down the name of the function for the graph shown below

[1]

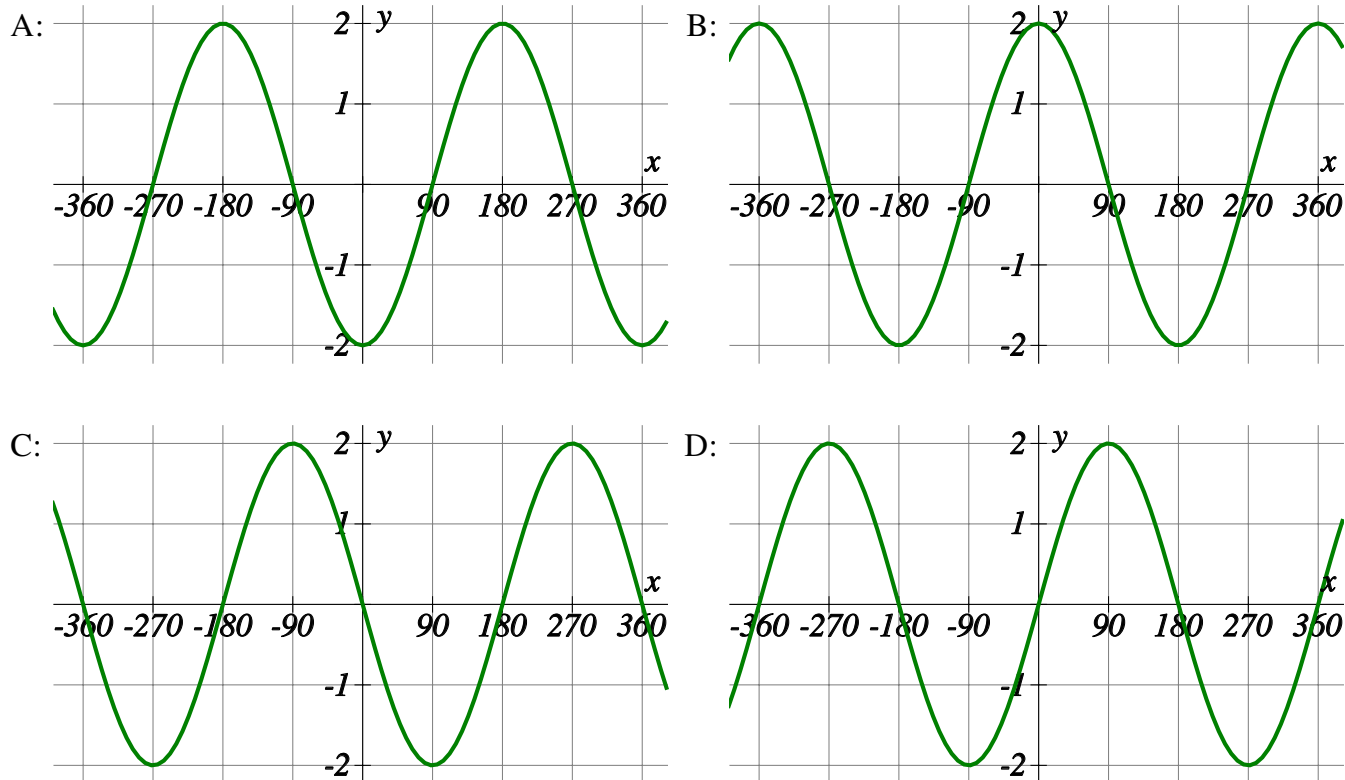


7) Write down the minimum and the maximum values of the following

[1]

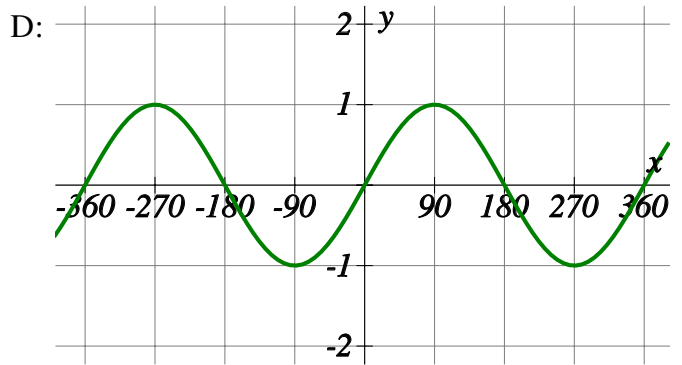
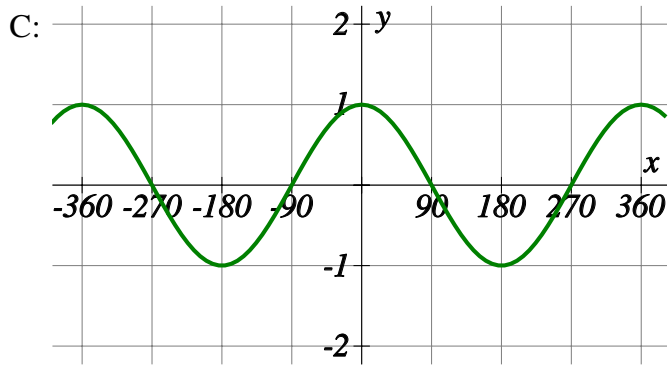
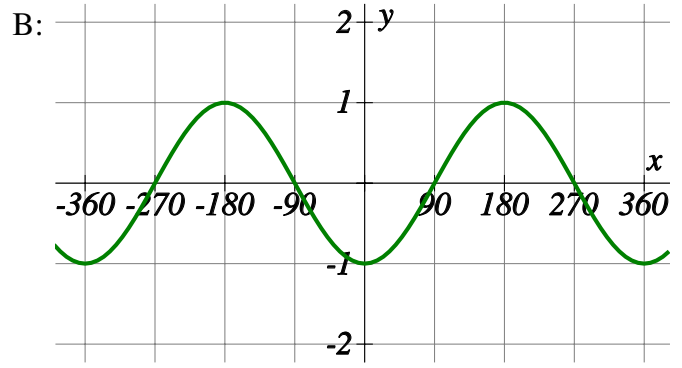
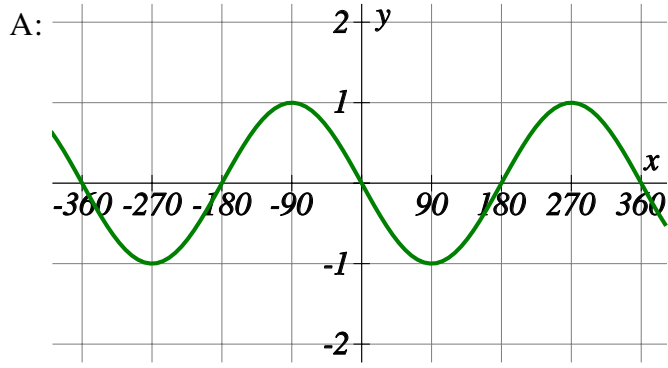
$$-5 \cos x$$

8) Which of the following graphs matches the equation $y = -2 \cos x$.



[1]

9) Which of the following graphs matches the equation $y = \sin(x + 90)$.



[1]

Solutions for the assessment 8. Graphs of Trigonometric functions

- 1) a) Corresponding angle is 65° b) Corresponding angle is $\frac{7\pi}{17}$
- 2) Quadrant 4
- 3) a) $\cos 540^\circ = -1$ b) $\cos 3\pi = -1$
- 4) a) $\sin(-45) = -\sin 45$ b) $\tan 350 = -\tan 10$
- c) $\cos\left(-\frac{7\pi}{9}\right) = -\cos \frac{2\pi}{9}$
- 5) a) $\cos 240^\circ = -\frac{1}{2}$ b) $\sin(-390) = -\frac{1}{2}$
- c) $\tan \frac{2\pi}{3} = -\sqrt{3}$ 6) $y = \cos x$
- 7) The minimum value is -5 and the maximum value is 5 8) A
- 9) C