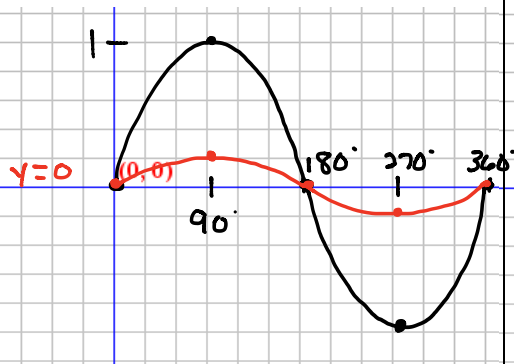


Graphs & Inverses of Trig Functions

1A - Parent Graphs of Sine & Cosine

Graph each function and its parent function. Graph a minimum of one period. Use DEGREES.

#1) $y = \frac{1}{5} \sin \theta$



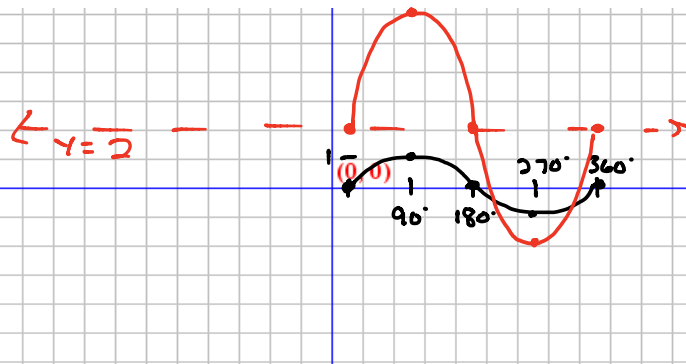
A: $\frac{1}{5}$
 Amplitude: $|\frac{1}{5}| = \frac{1}{5}$
 Reflected over midline? *NO*

Vertical Displacement: 0
 Midline: $y=0$

Phase Shift: 0

Period: 360°

#3) $y = 4 \sin \theta + 2$



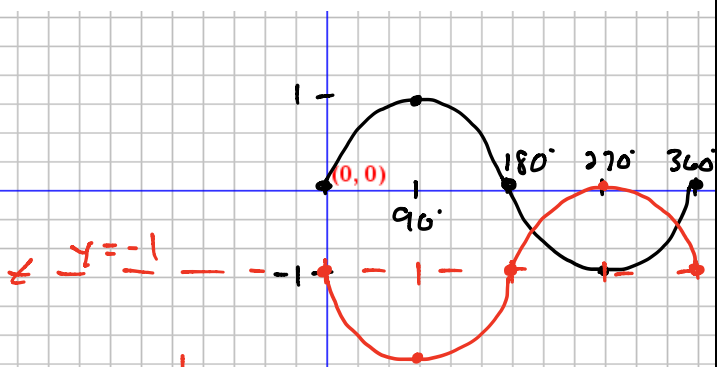
A: 4
 Amplitude: $|4| = 4$
 Reflected over midline? *NO*

Vertical Displacement: 2
 Midline: $y=2$

Phase Shift: 0

Period: 360°

#2) $y = -\sin \theta - 1$



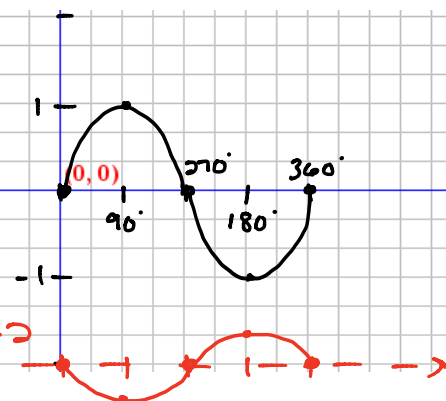
A: -1
 Amplitude: $|-1| = 1$
 Reflected over midline? *YES*

Vertical Displacement: -1
 Midline: $y=-1$

Phase Shift: 0

Period: 360°

#4) $y = -\frac{1}{3} \sin \theta - 2$



A: $-\frac{1}{3}$
 Amplitude: $|\frac{1}{3}| = \frac{1}{3}$
 Reflected over midline? *YES*

Vertical Displacement: -2
 Midline: $y=-2$

Phase Shift: 0

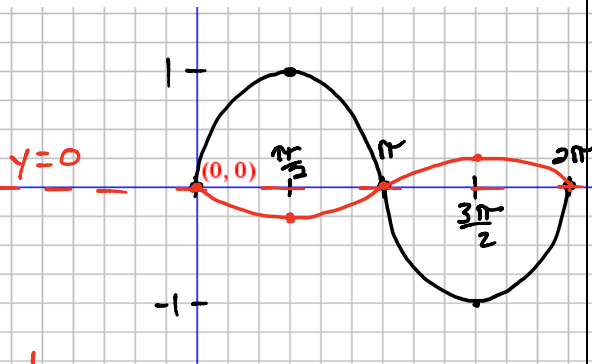
Period: 360°

Graphs & Inverses of Trig Functions

1A – Parent Graphs of Sine & Cosine

Graph each function and its parent function. Graph a minimum of one period. Use RADIANS.

#5) $y = -\frac{1}{4} \sin \theta$



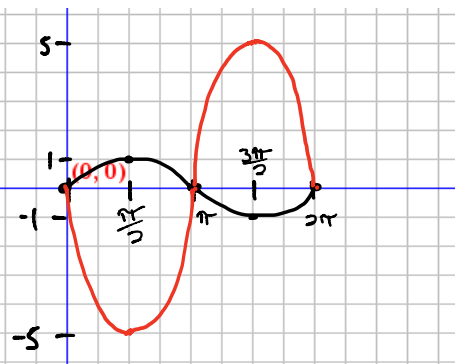
A: $-\frac{1}{4}$
 Amplitude: $|\frac{-1}{4}| = \frac{1}{4}$
 Reflected over midline? **YES**

Vertical Displacement: 0
 Midline: $y=0$

Phase Shift: 0

Period: 2π

#7) $y = -5 \sin \theta$



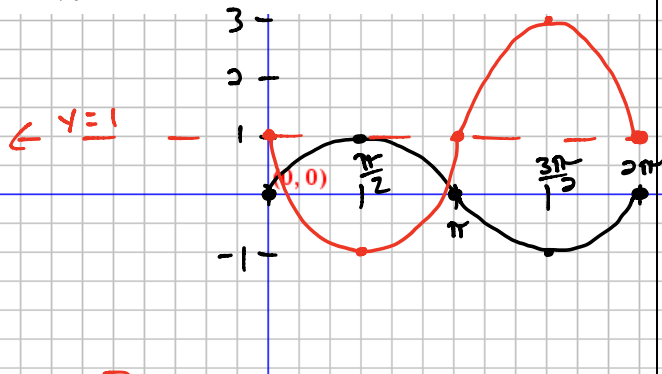
A: -5
 Amplitude: $|-5| = 5$
 Reflected over midline? **YES**

Vertical Displacement: 0
 Midline: $y=0$

Phase Shift: 0

Period: 2π

#6) $y = -2 \sin \theta + 1$



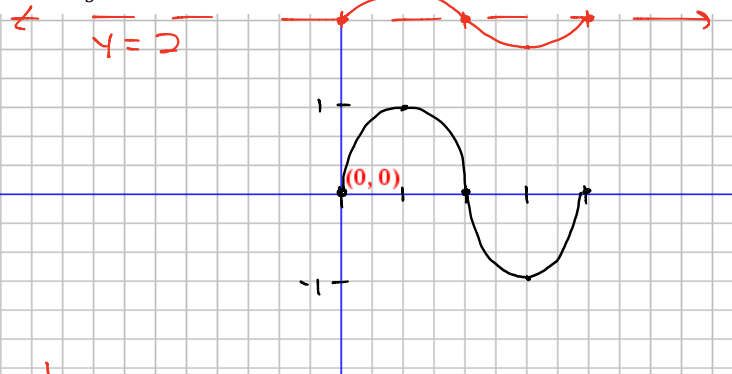
A: -2
 Amplitude: $|-2| = 2$
 Reflected over midline? **YES**

Vertical Displacement: 1
 Midline: $y=1$

Phase Shift: 0

Period: 2π

#8) $y = \frac{1}{3} \sin \theta + 2$



A: $\frac{1}{3}$
 Amplitude: $|\frac{1}{3}| = \frac{1}{3}$
 Reflected over midline? **NO**

Vertical Displacement: 2
 Midline: $y=2$

Phase Shift: 0

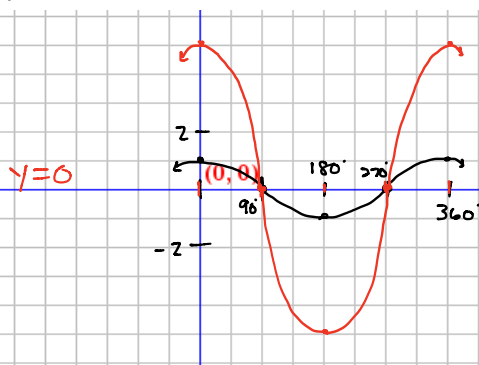
Period: 2π

Graphs & Inverses of Trig Functions

1A – Parent Graphs of Sine & Cosine

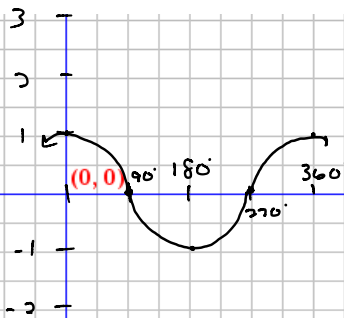
Graph each function and its parent function. Graph a minimum of one period. Use DEGREES.

#9) $y = 5 \cos \theta$



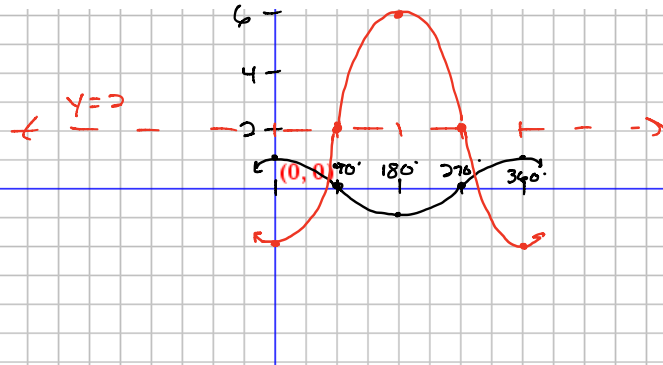
A: 5
 Amplitude: $|5| = 5$
 Reflected over midline? NO
 Vertical Displacement: 0
 Midline: $y = 0$
 Phase Shift: 0
 Period: 360°

#10) $y = -\frac{1}{2} \cos \theta - 3$



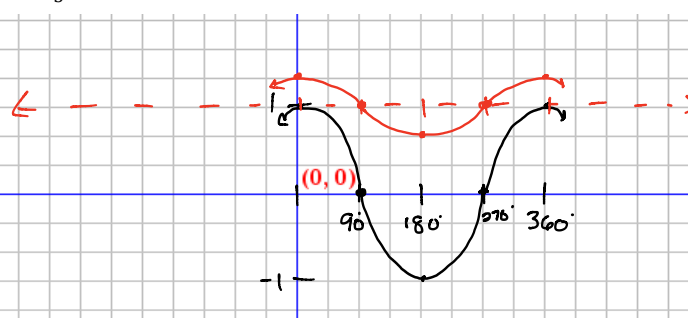
A: $-\frac{1}{2}$
 Amplitude: $|\frac{1}{2}| = \frac{1}{2}$
 Reflected over midline? YES
 Vertical Displacement: -3
 Midline: $y = -3$
 Phase Shift: 0
 Period: 360°

#11) $y = -4 \cos \theta + 2$



A: -4
 Amplitude: $|-4| = 4$
 Reflected over midline? YES
 Vertical Displacement: 2
 Midline: $y = 2$
 Phase Shift: 0
 Period: 360°

#12) $y = \frac{1}{3} \cos \theta + 1$



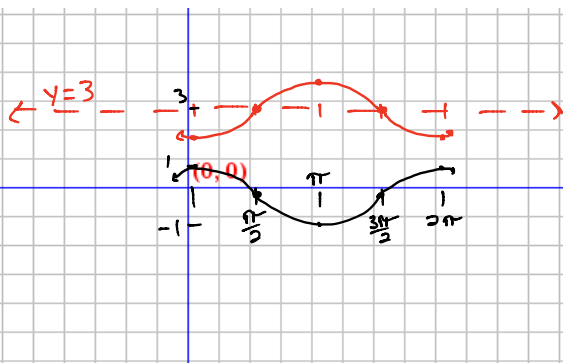
A: $\frac{1}{3}$
 Amplitude: $|\frac{1}{3}| = \frac{1}{3}$
 Reflected over midline? NO
 Vertical Displacement: 1
 Midline: $y = 1$
 Phase Shift: 0
 Period: 360°

Graphs & Inverses of Trig Functions

1A – Parent Graphs of Sine & Cosine

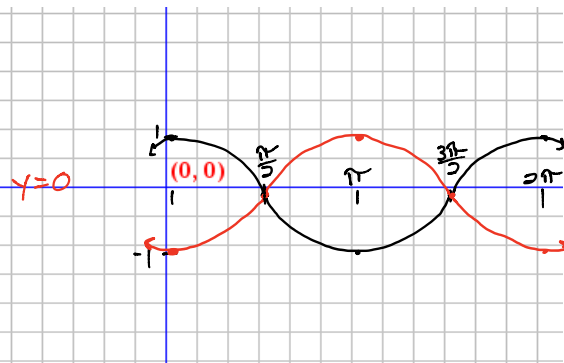
Graph each function and its parent function. Graph a minimum of one period. Use RADIANS.

#13) $y = -\cos \theta + 3$



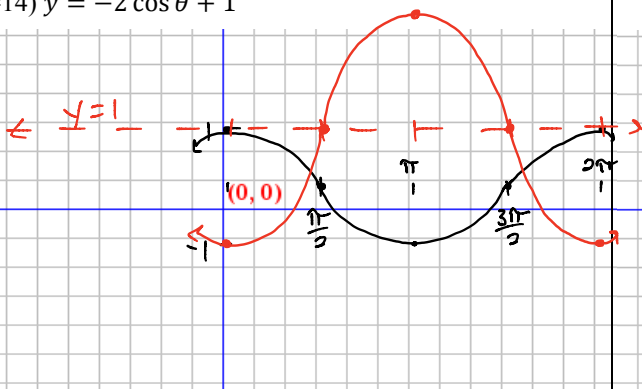
A: -1
 Amplitude: $|-1| = 1$
 Reflected over midline? *yes*
 Vertical Displacement: 3
 Midline: $y = 3$
 Phase Shift: 0
 Period: 2π

#15) $y = -\cos \theta$



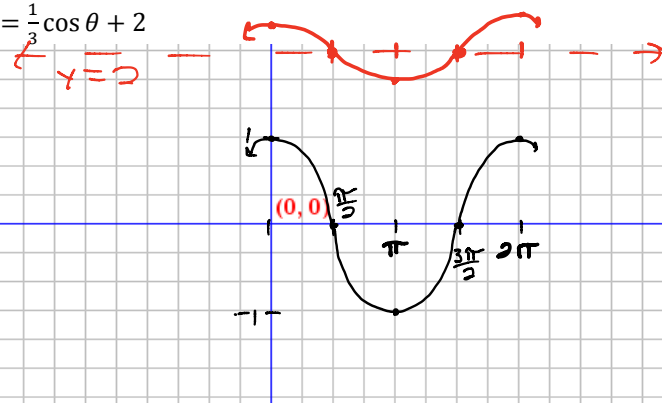
A: -1
 Amplitude: $|-1| = 1$
 Reflected over midline? *yes*
 Vertical Displacement: 0
 Midline: $y = 0$
 Phase Shift: 0
 Period: 2π

#14) $y = -2 \cos \theta + 1$



A: -2
 Amplitude: $|-2| = 2$
 Reflected over midline? *yes*
 Vertical Displacement: 1
 Midline: $y = 1$
 Phase Shift: 0
 Period: 2π

#16) $y = \frac{1}{3} \cos \theta + 2$



A: $\frac{1}{3}$
 Amplitude: $|\frac{1}{3}| = \frac{1}{3}$
 Reflected over midline? *no*
 Vertical Displacement: 2
 Midline: $y = 2$
 Phase Shift: 0
 Period: 2π