

Exercises 1.4

1. Give the amplitude of each of the following functions.

(a)  $f(x) = \frac{1}{3} \cos x$ .

b.  $g(x) = 3 \cos x$ .

(c)  $h(x) = -2 \sin x$ .

d.  $f(x) = \frac{1}{2} \sin x$ .

(e)  $g(x) = \frac{4}{3} \cos x$ .

f.  $h(x) = \frac{5}{9} \sin x$ .

(g)  $f(x) = \frac{-9}{5} \sin x$ .

h.  $g(x) = -17 \cos x$ .

(i)  $h(x) = -6 \cos x$ .

Graph the following functions.

2.  $\{(x, y) \mid y = 3 \sin x\}$

4.  $\{(x, y) \mid y = \frac{3}{2} \cos x\}$

~~6.~~  $\{(x, y) \mid y = \cos(-\frac{x}{4})\}$

8.  $\{(x, y) \mid y = \sin 4x\}$

10.  $\{(x, y) \mid y = \frac{1}{2} \cos 3x\}$

12.  $\{(x, y) \mid y = 4 \cos \frac{x}{3}\}$

~~14.~~  $\{(x, y) \mid y = -2 \cos 2\pi x\}$

~~3.~~  $\{(x, y) \mid y = -2 \cos x\}$

5.  $\{(x, y) \mid y = -\frac{1}{2} \sin x\}$

(7)  $\{(x, y) \mid y = \sin \frac{x}{3}\}$

(9)  $\{(x, y) \mid y = \cos(-3x)\}$

~~11.~~  $\{(x, y) \mid y = 3 \sin 2x\}$

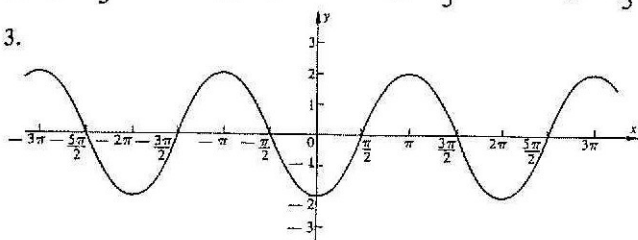
13.  $\{(x, y) \mid y = -\frac{3}{2} \sin \frac{x}{2}\}$

(15)  $\{(x, y) \mid y = 2 \sin \pi x\}$

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1. a.  $\frac{1}{3}$       c. 2      e.  $\frac{4}{3}$       g.  $\frac{9}{5}$       i. 6

3.



9.

