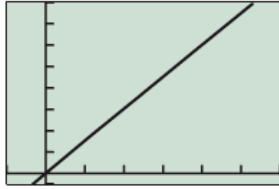


Quiz Review 1.1 - 1.3

Match the numerical model to the corresponding graphical model and algebraic model.

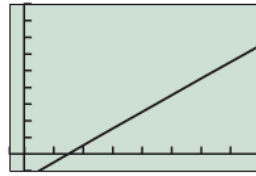
1.1 #2

x	0	1	2	3	4	5
y	2	3	6	11	18	27



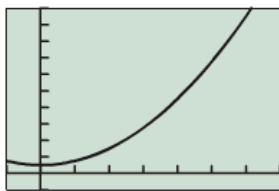
[-3, 18] by [-2, 32]

(d)



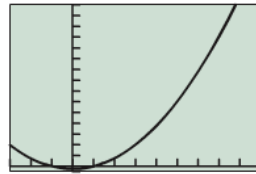
[-1, 16] by [-1, 9]

(g)



[-1, 7] by [-4, 40]

(f)



[-3, 9] by [-2, 60]

(i)

(l) $y = 40 - x^2$

(n) $y = \sqrt{x - 3}$

(p) $y = 3x - 2$

(r) $y = x^2 + 2$

(t) $y = \frac{x - 3}{2}$

Quiz Review 1.1 - 1.3

Solve the following equations and confirm your answer graphically

1.1 #29 $v^2 - 5 = 8 - 2v^2$

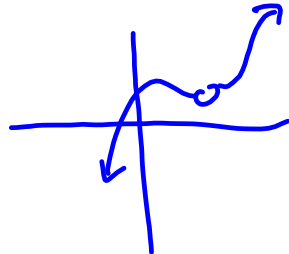
1.1 #31. $2x^2 - 5x + 2 = (x - 3)(x - 2) + 3x$

1.1 #37. $x + 1 - 2\sqrt{x + 4} = 0$

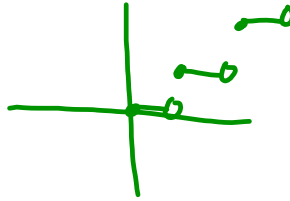
1.1 #38. $\sqrt{x} + x = 1$

D: discontinuous

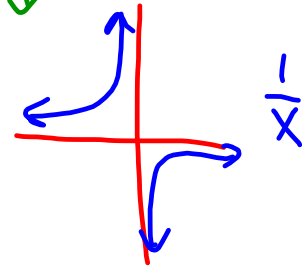
1 Removable - hole in graph
 - cancel out
 - pt removed
 - doesn't show up on calc



2 Jump



- asymptotes



3 Infinite

Find the domain of the function algebraically.

$$1.2 \#11 \quad f(x) = \frac{3x - 1}{(x + 3)(x - 1)}$$

$$1.2 \#14 \quad h(x) = \frac{\sqrt{4 - x}}{x - 3}$$

Find the range of the function

$$1.2 \#19 \quad f(x) = \frac{x^2}{1 - x^2}$$

Graph the function and tell whether or not it has a point of discontinuity. If there is a point of discontinuity, tell what type it is.

$$1.2 \text{ \#22 } h(x) = \frac{x^3 + x}{x}$$

$$1.2 \text{ \#23 } f(x) = \frac{|x|}{x}$$

State whether the function is even, odd or neither. Support graphically and confirm algebraically.

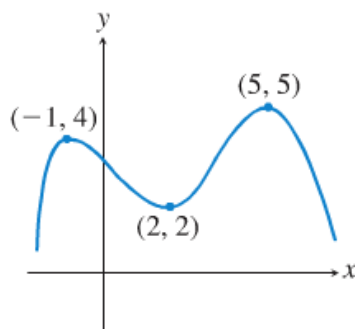
$$1.2 \text{ \#47 } f(x) = 2x^4$$

$$1.2 \text{ \#50 } g(x) = \frac{3}{1 + x^2}$$

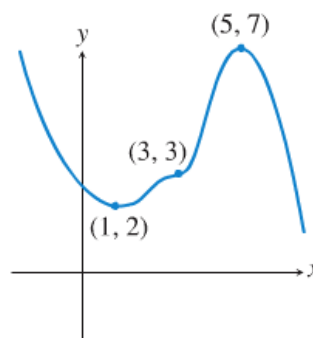
$$1.2 \text{ \#52 } g(x) = x^3 + 0.04x^2 + 3$$

State whether each labeled point identifies a local min, local max or neither. Identify intervals on which the function is decreasing and increasing.

1.2 #25



1.2 #26



Graph the function and identify intervals on which the function is increasing, decreasing, or constant.

1.2 #29 $f(x) = |x + 2| - 1$

1.2 #34 $f(x) = x^3 - x^2 - 2x$

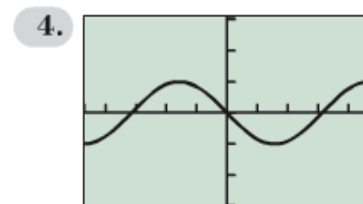
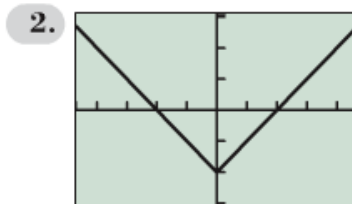
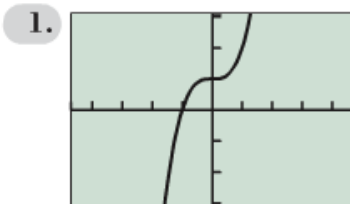
Find all horizontal and vertical asymptotes of the function.

1.2 #59 $f(x) = \frac{x^2 + 2}{x^2 - 1}$

1.2 #62 $h(x) = \frac{2x - 4}{x^2 - 4}$

Below are graphs that are slight variations of the parent functions.
Without using your calculator, match each graph to an equation given.

1.3 #1, 2 & 4



- | | | |
|------------------------------|-----------------------------|---------------------|
| (a) $y = -\sin x$ | (b) $y = \cos x + 1$ | (e) $y = e^x - 2$ |
| (d) $y = (x + 2)^3$ | (e) $y = x^3 + 1$ | (f) $y = (x - 1)^2$ |
| (g) $y = x - 2$ | (h) $y = -1/x$ | (i) $y = -x$ |
| (j) $y = -\sqrt{x}$ | (k) $y = \text{int}(x + 1)$ | |
| (l) $y = 2 - 4/(1 + e^{-x})$ | | |

