Wednesday, May 17

1. Which choice do all three lie on the same line?

A) {(4, 6), (6, 9), (10, 12)}

$$\frac{3}{2} = \frac{3}{4}$$

B) {(-1, 4), (1, 3), (5, 1)}

$$\frac{-1}{2} = \frac{-2}{4}$$

C) {(2, 3), (0, 5), (-2, -1)}

2. Which choice is both a square and a cube?

A) 1   B) 8   C) 25   D) 225 = 15

$$\sqrt[3]{1} = 1 \qquad \sqrt[3]{25} \qquad \sqrt[3]{225}$$

You do - no calculator

Function 1 is represented by the equation $y = 3x + 6$. Function 2 is represented in this table

x	y
1	5
3	9
4	11
7	17

Which function has the greater rate of change and by how much?

A. Function 1 has a greater rate of change by 3.

B. Function 1 has a greater rate of change by 1.

C. Function 2 has a greater rate of change by 3.

D. Function 2 has a greater rate of change by 1.

1: 3

2: 2

A linear function is represented by the table below

x	y
4	12
6	18
8	24
10	30

You do - try no calc

What is the *y*-intercept of the function?

A. ⁻3

B. 0

C. 3

D. 6

Michelle is planning an anniversary party at a restaurant. There is a fee to use the banquet room, plus dinner for each guest. The table below lists the total cost based on the number of guests.

Number of Guests	Total Cost
25	$425
30	$505
35	$585
40	$665
50	$825

Using a linear model, what does the *y*-intercept represent?

You do - calc active

A. The fee to use the room is $16.

B. The fee to use the room is $25.

C. The cost of dinner is $16 per person.

D. The cost of dinner is $25 per person.

The table below lists points of a linear function.

x	y
-1	2
1	6
2	8
5	14

$2 \binom{-1}{0}$ ... $\binom{4}{6} 4$

$1 \binom{1}{2}$ ... $\binom{8}{2} 2$

$\frac{4}{2}$ $\frac{2}{1}$

2

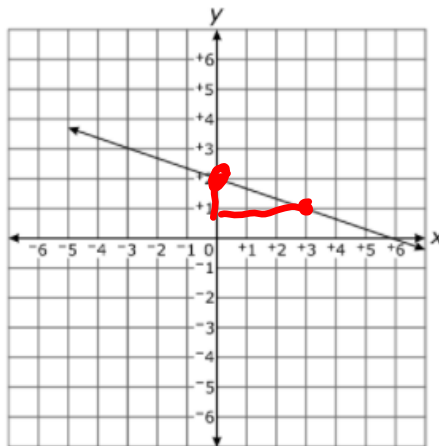Which equation represents this function?

A. $y = {}^-x + 5$

B. $y = {}^-x + 2$

C. $y = 2x + 4$

D. $y = 4x + 2$

You do -try no calc first, then check in Desmos

You do - no calc

A line is shown on the graph.

What is the equation of the graph?

A. $y = {}^-\frac{1}{3}x + 2$

B. $y = \frac{1}{3}x + 2$

C. $y = {}^-2x - \frac{1}{3}$

D. $y = 2x + \frac{1}{3}$

This table shows points of a linear function

x	y
−2	−18
0	−8
1	−3

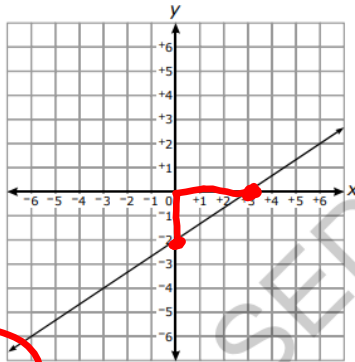Which equation represents the linear function?

You do - no calc

A. $y = {}^{-}8x + 5$

B. $y = {}^{-}8x - 5$

C. $y = {}^{-}5x - 8$

D. $y = 5x - 8$

What is the equation of the line graphed below?

You do - no calc

A $y = \frac{2}{3}x - 2$

B $y = \frac{2}{3}x + 3$

C $y = \frac{3}{2}x - 2$

D $y = \frac{3}{2}x + 3$

Which is the graph of the linear equation $y = -x$?

You do - no calc

A

B

C

D

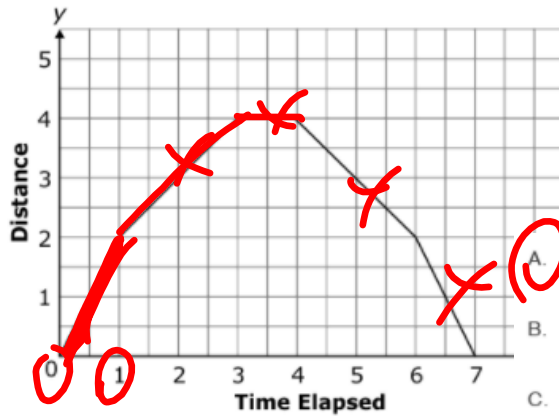What are all the domains in which the function is decreasing?

You do

A. The function is decreasing when x is between $^-5$ and $^-3$ and when x is between 7 and 10.

B. The function is decreasing when x is between 0.5 and 4 and when x is between 7 and 10.

C. The function is decreasing when x is between $^-5$ and $^-3$, when x is between 0.5 and 4, and wh between 7 and 10.

D. The function is decreasing when x is between $^-7$ and 2, when x is between $^-7$ and 4.25, and w between $^-3.5$ and $^-2$.
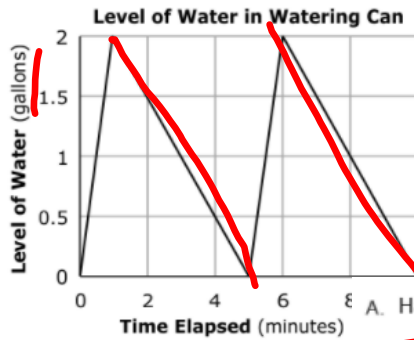
This graph shows movement of an object over time.

You do

For which values of *x* is *y* increasing the fastest?

A. between *x* = 0 and *x* = 1

B. between *x* = 1 and *x* = 3

C. between *x* = 3 and *x* = 4

D. between *x* = 6 and *x* = 7

This graph shows the level of water in gallons that Hank has in a watering can.

You do

Level of Water in Watering Can

What is *most likely* happening when the graph is decreasing?

A. Hank is putting the watering can away for the day.

B. Hank is using the watering can to water a plant.

C. Hank is carrying the watering can to his plants.

D. Hank is filling the watering can with water.