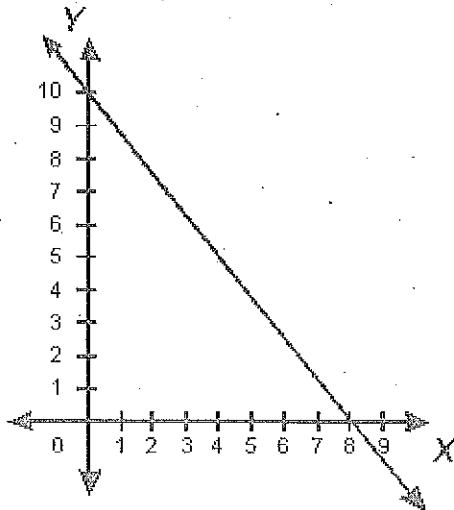


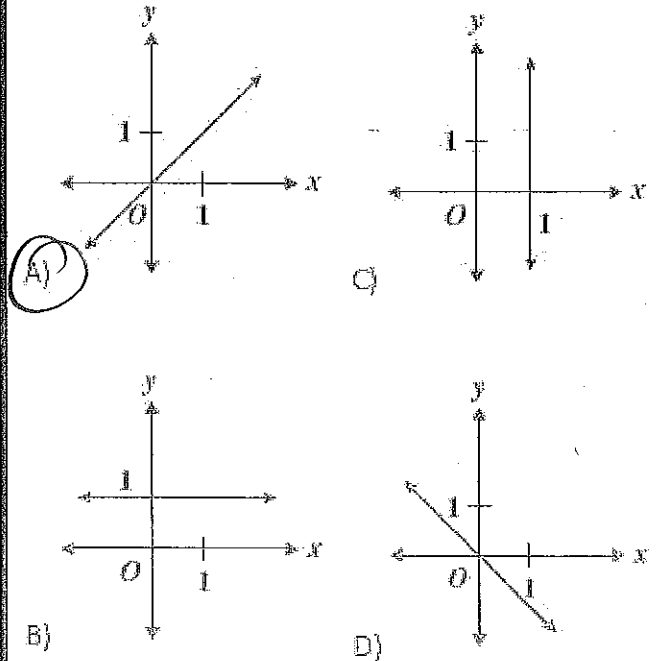
8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.

What is the slope of the line shown below?



- A) $-\frac{5}{4}$ C) $\frac{4}{5}$
 B) $-\frac{4}{5}$ D) $\frac{5}{4}$

Which of the following is a graph with a slope of 1?



The slope of the line through points (1, 1) and (1, 2) is:

- A) zero
 B) negative
 C) positive
 D) undefined

Sketch it!

Which of these sets of ordered pairs would define a line with a negative slope?

- A) (5, 5) (0, 1)
 B) (2, 3) (-4, -1)
 C) (3, 6) (5, 1)
 D) (2, 3) (7, 6)

Sketch it!

Sudsy's Detergent	
Number of Ounces	Cost of Detergent
5	\$3
10	\$6
15	\$9
20	\$12

A laundromat sells two varieties of detergent: Sudsy's and Super Clean. The costs of different packages of Sudsy's detergent are shown in the table to the left.

The cost of Super Clean detergent can be expressed by the equation $y = 0.6x$, where x is the number of ounces and y is the total price.

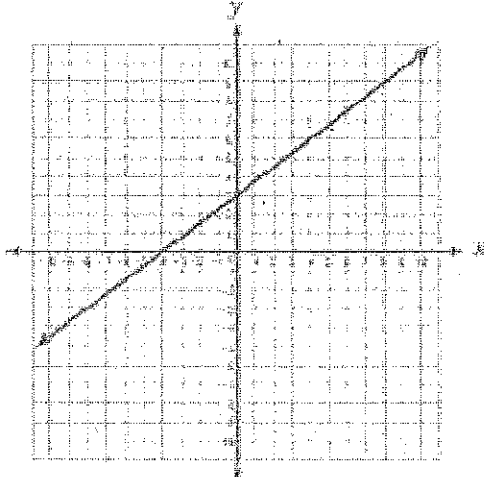
Erika determined the unit rate of Sudsy's to be $\frac{3}{5}$, or \$3 per 5 ounces, and the unit rate of Super Clean to be 0.6, or \$0.60 per ounce. Erika then said that Sudsy's is the more expensive detergent.

Why is Erika's answer incorrect? Give the correct answer in your explanation.

Sudsy's is \$3 per 5 ounces $\frac{3}{5} = \frac{6}{10} = .6$
 So their rates are equal.

8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.

Below is the graph of a line.

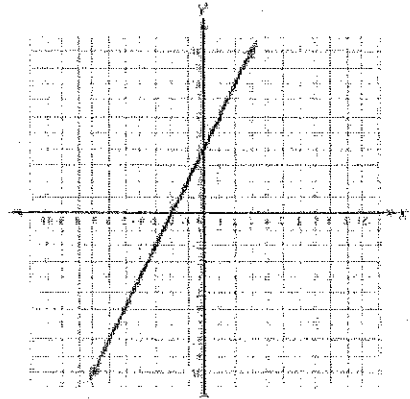


Which is the slope of the line?

- A. $\frac{1}{2}$ B. $\frac{3}{4}$ C. $\frac{3}{3}$ D. 3

Below is a table showing one linear function and a graph showing another linear function.

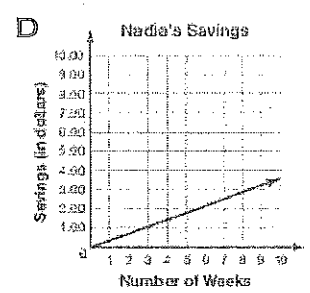
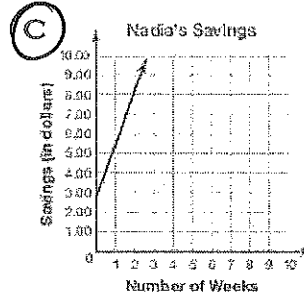
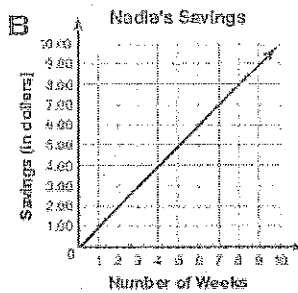
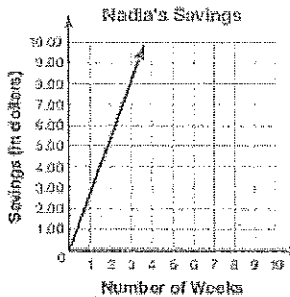
x	y
-5	-9
-4	-6
-2	0
1	9
2	12



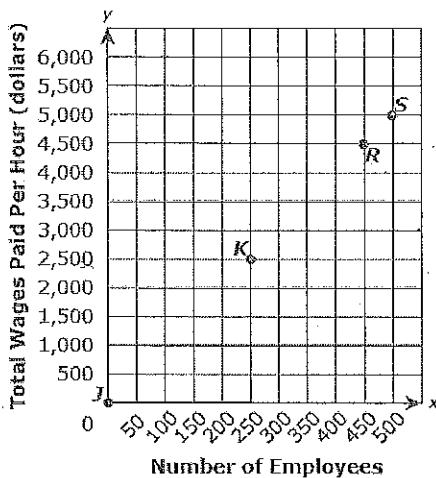
Which of the following is true?

- A. The function represented in the table has the greater rate of change.
 B. The function represented in the graph has the greater rate of change.
 C. Both functions have the same rate of change.
 D. Neither function has a positive or a negative rate of change.

NADIA OPENS A SAVINGS ACCOUNT THAT EARNS INTEREST AT A RATE OF \$2.75 EVERY WEEK. SHE STARTS HER ACCOUNT WITH \$3. WHICH GRAPH SHOWS NADIA'S EARNINGS OVER TIME?



Call Center's Hourly Wages



The graph represents the wages a call center pays its entry-level employees, where y is the total wages paid per hour for x employees.

Part A

Calculate the unit rate from point J to point K , the unit rate from point K to point R , and the unit rate from point R to point S . Show your work. What conclusion can be made about points J , K , R , and S ?

$$\frac{2500}{250} = \$10 \text{ per hr. Their rates are the same.}$$

Part B

A grocery store is filling entry-level management positions. The store pays \$13.25 per hour for each employee. Write an equation representing this situation.

$$y = 13.25x$$

Part C

A job seeker inquires about the hourly wages paid at the call center and at the grocery store. She decides to apply for the job that pays more per hour. For which job should the job seeker apply? Explain your answer.

Grocery Store - (\$13.25 per hr > \$10 per hr.)