

Concept of Functions Worksheet 1

(!)T3— 8.F.2 - Compare the properties of two linear functions represented in different ways

Score _____

Use the following information to compare the four functions.

A rate of change is a rate that describes how one quantity changes in relation to another.

Level 2.0, Include the negatives on this section.

Function A

$$y = \frac{-7}{2}x + 12$$

What is the rate of change?

What is the y-intercept (initial value)?

Function B

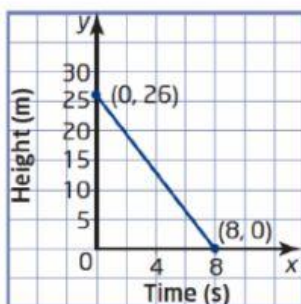
Drake rented a car from city rents, he paid an upfront fee of \$30 and \$62 a per day.

What is the rate of change?

What is the y-intercept (initial value)?

Function C

The graph shows the height above the ground of a rock climber over time.



Use the boxes below to find the rate of change.

$$\frac{\text{Change in } y}{\text{Change in } x} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{\boxed{} - \boxed{}}{\boxed{} - \boxed{}} = \frac{\boxed{}}{\boxed{}}$$

What is the y-intercept (initial value)?

Function D

The table shows the number of textbooks in relation to the number of students.

Students	Number of Textbooks
5	15
10	30
15	45
20	60

Use the boxes below to find the rate of change.

$$\frac{\text{Change in } y}{\text{Change in } x} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\frac{\boxed{} - \boxed{}}{\boxed{} - \boxed{}} = \frac{\boxed{}}{\boxed{}}$$

What is the y-intercept (initial value)?

Think, how many books are sold to zero students?

Level 3.0 Write the answer as FunctionG, use capitals, no spaces. Don't include any negatives.

- a. Put the functions in order from least to greatest by rate of change.

Least 1 _____

2 _____

3 _____

Greatest 4 _____

- b. Put the functions in order from least to greatest by y-intercept (initial value).

Least 1 _____

2 _____

3 _____

Greatest 4 _____