

PROPORTIONAL RELATIONSHIPS: TABLES

Use your understanding of rate of change to answer the questions below.

1. Three pounds of bananas cost \$1.95. Which of the following is not true?

- a. One pound of bananas is \$0.75.
- b. The equation $y = 0.65x$ could be used to determine the cost of x pounds of bananas.
- c. Seven pounds of bananas is \$4.55.

2. As the x -values increase by 1, the y -values increase by 15. Which equation shows this?

- a. $y = 15 + x$
- b. $y = 15 - x$
- c. $y = 15x$

For each table below, determine the rate of change and write an equation.

3.

| x | y |
|---|----|
| 1 | 4 |
| 2 | 8 |
| 3 | 12 |
| 4 | 16 |

rate of change: _____

equation: _____

4.

| x | y |
|---|----|
| 2 | 7 |
| 4 | 14 |
| 6 | 21 |
| 8 | 28 |

rate of change: _____

equation: _____

5.

| x | y |
|---|------|
| 4 | 3 |
| 5 | 3.75 |
| 6 | 4.5 |
| 7 | 5.25 |

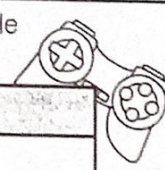
rate of change: _____

equation: _____

6. James is saving \$15 per week in order to purchase a gaming console. Create a table to represent the relationship between x , the number of weeks and y , the total amount James has saved.

a. Write an equation to represent the situation.

b. James has a goal to save \$360 in 22 weeks. Will he meet his goal? Explain.



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7. Mr. Brown asked his students create a representation with a rate of change of 2.5. Circle the students who correctly completed the task.

ELIJAH

$$y = 2.5 + x$$

ZANE

Four boxes of
tissue cost \$10.

MARCO

$$y = 2.5x$$