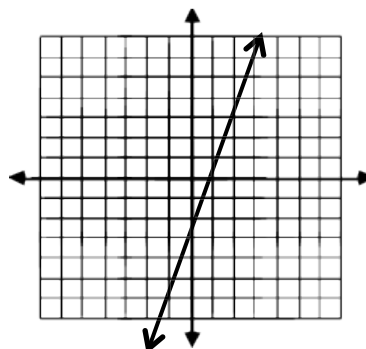


Given the two linear equations below, choose Yes or No to indicate whether the following statements are true.

Linear Equation A

$$y = -2x + 1$$

Linear Equation B

- | | | |
|--|---------------------------|--------------------------|
| A. The rate of change for Linear Equation B is greater than Linear Equation A. | <input type="radio"/> Yes | <input type="radio"/> No |
| B. The x -intercept of both equations is an integer. | <input type="radio"/> Yes | <input type="radio"/> No |
| C. Both equations have a y -intercept of $(0, -2)$. | <input type="radio"/> Yes | <input type="radio"/> No |
| D. Both linear equations are functions. | <input type="radio"/> Yes | <input type="radio"/> No |

Scoring:

2 points: Selected A and D. (YNNY)

1 point: Selected A or D only. (YNNN or NNNY)

0 points: Any other combination.

Key and Distractor Analysis:

A. Key. Rate of change for Equation B is 3 whereas Equation A is -2 .

B. Student may be confusing x -intercepts with y -intercepts. Both x -intercepts are fractions.

C. Equation B's y -intercept is $(0, -2)$. Equation A's y -intercept is $(0, 1)$, its slope is -2 .

D. Key. Both equations have exactly one unique output for each input.

Functions**8.F**

Define, evaluate, and compare functions.

2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.