

Assignment

LESSON 2: A Sort of Sorts

Write

Describe the importance of graphical representations.

Remember

Graphs of relationships between quantities have characteristics that can give you important information about the relationship. For example, a graph can be increasing, decreasing, neither increasing nor decreasing, or both increasing and decreasing. A graph can have straight lines or smooth curves, a maximum or minimum, or no maximum or minimum, and so on.

Practice

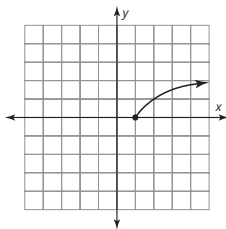
1. Record the letter of each graph with the given characteristic.

- a. has a vertical axis of symmetry
- b. has a horizontal axis of symmetry
- c. passes through exactly 1 quadrant
- d. passes through all 4 quadrants

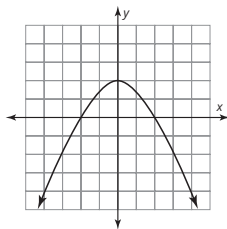
Visit livehint.com/texas or use this QR code if you need a hint on the Practice questions.



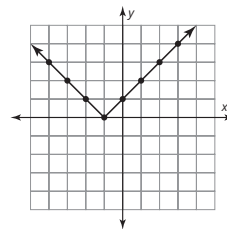
A.



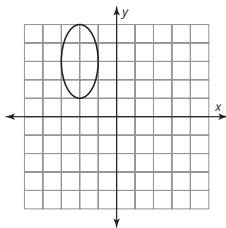
B.



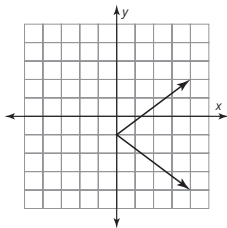
C.



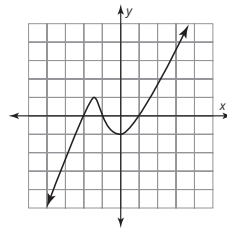
D.



E.



F.



Assignment Answers

Write

Sample answer.

Graphs provide a visual representation of a function. They provide a model to see and interpret key features.

Practice

1a. B, C, D

1b. D, E

1c. A, D

1d. B, F

Assignment Answers

Stretch

1. passes through 2 quadrants
2. passes through 2 quadrants
3. passes through 3 quadrants
4. vertical axis of symmetry, passes through 2 quadrants
5. horizontal axis of symmetry, passes through 2 quadrants

Review

1. Independent quantity:
Weight of Turkey (pounds)
Dependent quantity:
Time (minutes)
Graph B
2. $y = 2$
3. -31

Stretch

Describe characteristics of each graph, including whether or not it has a vertical or horizontal axis of symmetry and the number of quadrants it passes through.

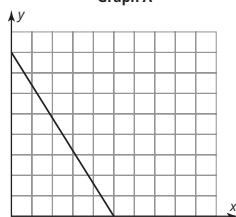
1. diagonal line through the origin that increases from left to right
2. diagonal line through the origin that decreases from left to right
3. diagonal line that does not pass through the origin
4. horizontal line below the origin
5. vertical line to the right of the origin

Review

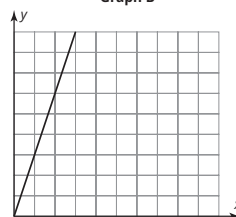
1. Read the scenario and identify the independent and dependent quantities. Be sure to include the appropriate units of measure. Then determine which graph models the scenario.

Henry is cooking a turkey for his family. His recipe says to cook the turkey for 15 minutes per pound.

Graph A



Graph B



2. Solve the equation $8y + 13 = 29$.
3. Evaluate the expression $6z + 5(-2z - 7)$ for $z = -1$.