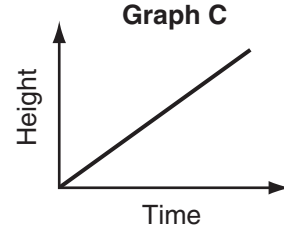
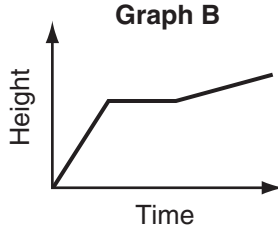
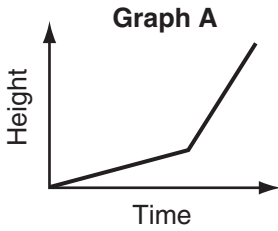


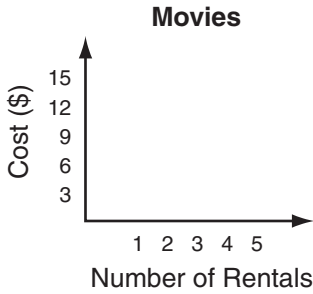
LESSON
4-1

Practice B
Graphing Relationships

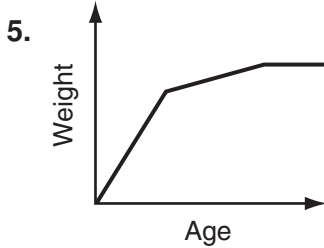
Choose the graph that best represents each situation.

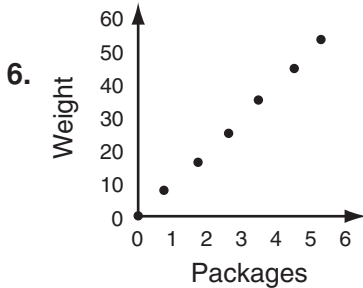


1. A tomato plant grows taller at a steady pace.
2. A tomato plant grows quickly at first, remains a constant height during a dry spell, then grows at a steady pace.
3. A tomato plant grows at a slow pace, then grows rapidly with more sun and water.
4. Lora has \$15 to spend on movie rentals for the week. Each rental costs \$3. Sketch a graph to show how much money she might spend on movies in a week. Tell whether the graph is continuous or discrete.



Write a possible situation for each graph.





LESSON 4-1 Practice A Graphing Relationships

For each, write if the height is *rising, falling, or staying the same*.

- _____ falling _____
- _____ staying the same _____
- _____ rising _____

Choose the graph that best represents each situation.

- _____ Graph B _____
- _____ Graph C _____
- _____ Graph A _____

- The temperature of the water in a glass remained constant.
- The temperature of the water in a glass rose steadily for several hours until it reached room temperature, then remained constant.
- The temperature of the water in a glass cooled down steadily with the addition of ice, then remained constant when all the ice had melted.
- Don's hair grows steadily longer between haircuts. Sketch a graph to show the length of Don's hair between two haircuts. Is the graph continuous or discrete?
_____ continuous _____

Write a possible situation for the graph.

- _____ Possible answer: A subway train has up to 6 cars. Each car can hold 40 passengers. _____

Copyright © by Holt, Rinehart and Winston. All rights reserved. 3 Holt Algebra 1

LESSON 4-1 Practice B Graphing Relationships

Choose the graph that best represents each situation.

- _____ Graph C _____
- _____ Graph B _____
- _____ Graph A _____

- A tomato plant grows taller at a steady pace.
- A tomato plant grows quickly at first, remains a constant height during a dry spell, then grows at a steady pace.
- A tomato plant grows at a slow pace, then grows rapidly with more sun and water.
- Lora has \$15 to spend on movie rentals for the week. Each rental costs \$3. Sketch a graph to show how much money she might spend on movies in a week. Tell whether the graph is continuous or discrete.

_____ discrete _____

Write a possible situation for each graph.

- _____ Possible answer: A kitten gains weight quickly after birth, then more slowly, until it reaches its maximum weight. _____
- _____ Possible answer: Each package weighs 10 pounds. The box can hold up to 60 pounds. _____

Copyright © by Holt, Rinehart and Winston. All rights reserved. 4 Holt Algebra 1

LESSON 4-1 Practice C Graphing Relationships

Choose the graph that best represents each situation.

- _____ Graph A _____
- _____ Graph C _____
- _____ Graph B _____

- A person leaves home, drives through town, then on the highway, and finally stops at a rest area.
- A person leaves home, drives to the other end of town and buys groceries, then returns home.
- A person walks to a friend's house where she stays overnight.
- Franco's heart rate increases steadily as he does some warm-up exercises. He then maintains a steady heart rate for several minutes as he jogs. Finally, his heart rate slows down to normal with his cool-down walk. Sketch a graph to show Franco's heart rate over time as he exercises. Tell whether the graph is continuous or discrete.

_____ continuous _____

Write a possible situation for each graph.

- _____ Possible answer: An object is thrown up in the air; drops to the ground, and bounces 3 times. _____
- _____ Possible answer: With each additional person in the group, the cost per person for a group trip drops. _____

Copyright © by Holt, Rinehart and Winston. All rights reserved. 5 Holt Algebra 1

LESSON 4-1 Reteach Graphing Relationships

Graphs are a way to turn words into pictures. Be sure to read the graphs from left to right.

 increasing	 decreasing	 stays the same
Other descriptions: rose gained grew	Other descriptions: fell lessened diminished	Other descriptions: constant steady continuous

You can divide the graph into sections every time the graph changes directions. Then label each section.

Picture **Words**

This graph increases, then stays constant, increases again, and finally decreases sharply.

Divide each graph into sections where the graph changes directions. Then label the sections as *increasing, decreasing, or same*.

- _____ Graph B _____
- _____ Graph A _____

- Which graph above shows that the air temperature fell steadily, leveled off, fell again, and then increased slightly?
_____ Graph B _____

Copyright © by Holt, Rinehart and Winston. All rights reserved. 6 Holt Algebra 1