A rate of change

Natalie made a trip to her cabin on the lake and back. The trip there took four hours and the trip back took five hours. What was Natalie's average speed on the trip there if she averaged 56 mph on the return trip?

A jet left London and flew toward the airshow. An Air Force plane left one hour later flying at 360 km/h in an effort to catch up to the jet. After flying for five hours the Air Force plane finally caught up. Find the jet's average speed.

Maria left the hardware store one hour before Eugene. They drove in opposite directions. Eugene drove at 40 km/h for five hours. After this time they were 320 km apart. Find Maria's speed.

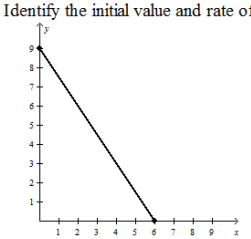
Kenny has $1,000 in the bank. He earns $175 every week at his afterschool job. What is the rate of change for the scenario described?

a. 1,000
b. 825
c. 1,175
d. 175

Jake's baby pool is empty. His mom fills it with a garden hose at a rate of 3 gallons per minute. What is the initial value for the scenario described?

a. 3
b. 1
c. 0
d. 60

Identify the initial value and rate of change for the graph shown.



a. Initial value: 6, rate of change: (3 / 2)
b. Initial value: 9, rate of change: (–3 / 2)
c. Initial value: 9, rate of change: (3 / 2)
d. Initial value: 6, rate of change: (–3 / 2)

What is the rate of change and initial value for the linear relation that includes the points shown in the table?

x	*y*
1	6
3	10
5	14
7	18

a. Initial value: 4, rate of change: 2
b. Initial value: 3, rate of change: 3
c. Initial value: 3, rate of change: 2
d. Initial value: 4, rate of change: 3