

Name: _____

Rate of Change

1. For St. Patrick's Day, Christina bought several bags of green candy for her friends. Each bag contained a different number of pieces of candy.

# of Pieces of Candy	Cost per Bag
7	\$3.00
14	\$6.00
21	\$9.00
28	\$12.00
35	\$15.00

Identify the cost of one piece of candy.

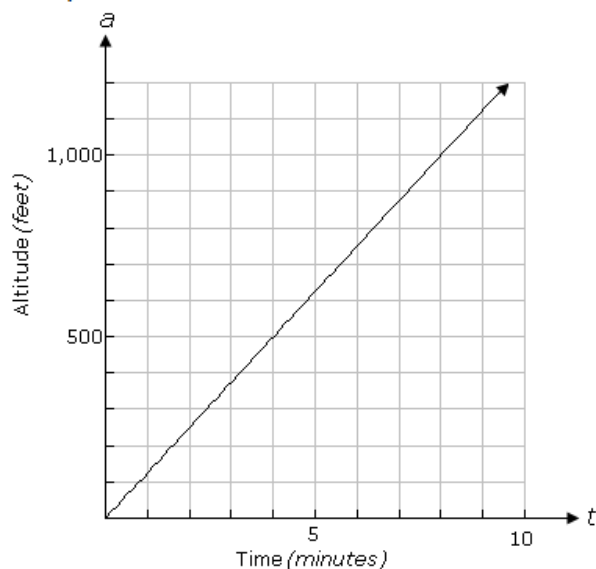
- ☐ A. \$2.33
☐ B. \$0.43
☐ C. \$0.49
☐ D. \$3.00

2. The electric usage for a computer repair company was charted over four months. What is the rate of change for the bill during that time?

KWH used	Billing
515	\$87.55
1,062	\$180.54
1,326	\$225.42
1,788	\$303.96

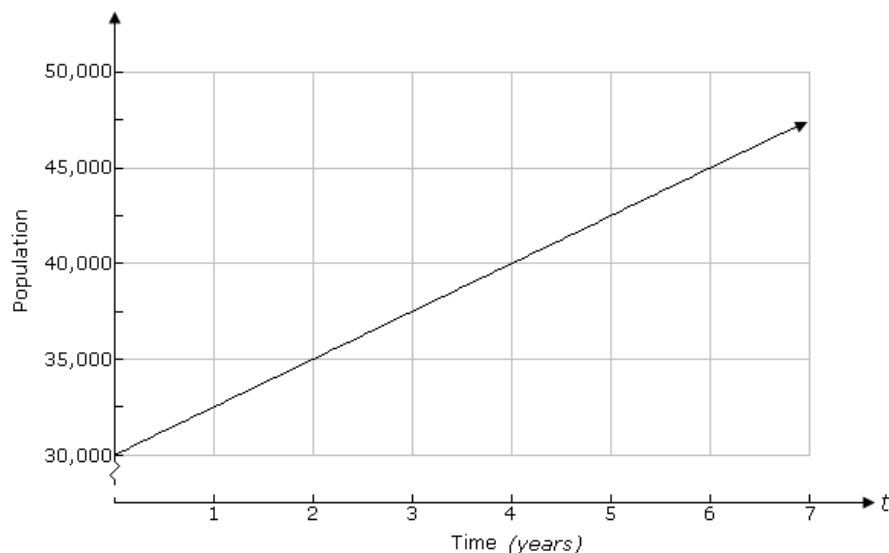
- ☐ A. \$0.17 per KWH
☐ B. \$0.48 per KWH
☐ C. \$2.06 per KWH
☐ D. \$0.74 per KWH

3. The graph shows the altitude, a , of a plane, in feet, after t minutes. What is the rate of ascent of the airplane?



- ☐ A. 150 feet per minute
☐ B. 120 feet per minute
☐ C. 175 feet per minute
☐ D. 125 feet per minute

4. The graph shows the population, p , of a town after t years have elapsed. What is the annual rate of growth in the town?



- ☐ A. 2,000 people per year
- ☐ B. 3,000 people per year
- ☐ C. 3,500 people per year
- ☐ D. 2,500 people per year

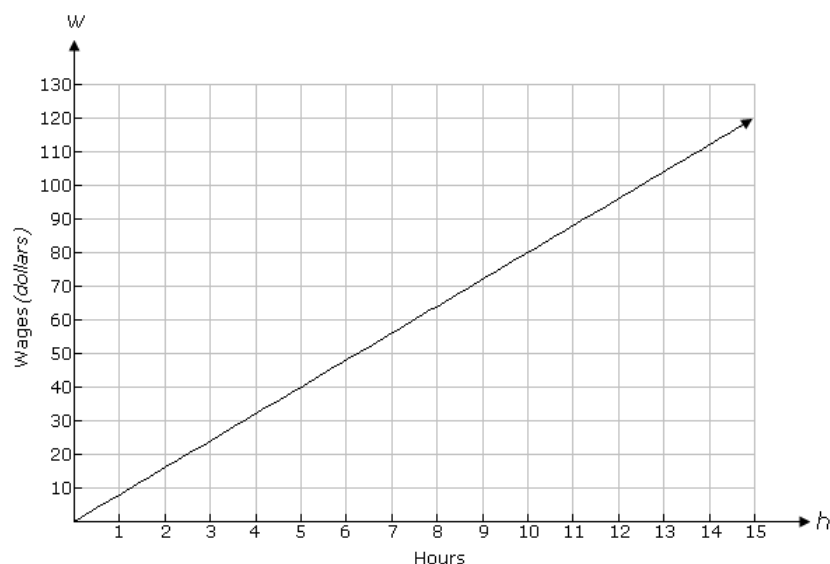
5. In P.E. class, the students recorded their number of heartbeats after exercising. Below is a chart with the number of heartbeats recorded after 30, 50, and 70 seconds of exercise.

What is the rate of change of the data in heartbeats per minute?

Seconds Passed	No. Heartbeats
30	54
50	90
70	126

- ☐ A. 72
- ☐ B. 180
- ☐ C. 108
- ☐ D. 90

6.



- ☐ A. \$8.00
- ☐ B. \$9.00
- ☐ C. \$10.00
- ☐ D. \$4.00

The graph above shows the amount Tina earns, w , before taxes after working h hours. How much does Tina make per hour?