

Homework 5.1

1) Bill spent \$14 on seven toy cars.

A. Write an inequality that can be used to determine the maximum number of toy cars that can be purchased with \$9.75.

B. What is the maximum number of toy cars that can be purchased with \$9.75?

2) You purchase 3 boxes of envelopes for \$10.17.

A. Write an inequality that can be used to determine the maximum number of boxes of envelopes that can be purchased with a budget of \$25.

B. What is the maximum number of boxes of envelopes that can be purchased with \$25?

3) Ming's Bikes rents bikes for \$18 plus an hourly rate. Lea paid \$33 to rent a bike for 5 hours.

A. Write an inequality that can be used to determine the number of hours that Lea can rent a bike if she has \$40.

B. What is the maximum number of hours that Lea can rent the bike if she has \$40?

4) You bought one \$5 magazine and 4 notebooks for \$16.

A. Write an inequality that can be used to determine the maximum number of notebooks that can be purchased along with one magazine if you only have \$13.50.

B. What is the maximum number of notebooks that can be purchased along with one \$5 magazine, if you only have \$13.50?

Solve each proportion.

5) $\frac{6}{8} = \frac{7n - 14}{7}$

6) $\frac{x - 6}{9} = \frac{4}{2}$

Answers to Homework 5.1

- 1) $9.75 > 2x$, 4 toy cars
- 2) $25 > 3.39x$, 7 boxes of envelopes
- 3) $40 > 3x + 18$, 7 hours
- 4) $13.50 > 2.75x + 5$, 3 notebooks
- 5) $\{2.75\}$
- 6) $\{24\}$