

Lesson 1 Practice Problems

1. The videography team entered a contest and won a monetary prize of \$1,350.

Which expression represents how much each person would get if there were x people on the team?

- A. $\frac{1350}{x}$
 - B. $1350 + x$
 - C. $\frac{1350}{5}$
 - D. $1350 - x$
2. To support a local senior citizens center, a student club sent a flyer home to the n students in the school. The flyer said, "Please bring in money to support the senior citizens center. Paper money and coins accepted!" Their goal is to raise T dollars.

Match each quantity to an expression, an equation, or an inequality that describes it.

- | | |
|--|---------------|
| A. the dollar amount the club would have if they reached half of their goal | 1. $T + 50$ |
| B. the dollar amount the club would have if every student at the school donated 50 cents to the cause | 2. $0.5T$ |
| C. the dollar amount the club could donate if they made \$50 more than their goal | 3. $0.25n$ |
| D. the dollar amount the club would still need to raise to reach its goal after every student at the school donated 50 cents | 4. $0.5n$ |
| E. the dollar amount the club would have if half of the students at the school each gave 50 cents | 5. $T - 0.5n$ |

3. Each of the 10 students in the baking club made 2 chocolate cakes for a fundraiser. They all used the same recipe, using C cups of flour in total.

Write an expression that represents the amount of flour required for one cake.

4. A student club started a fundraising effort to support animal rescue organizations. The club sent an information flyer home to the n students in the school. It says, "We welcome donations of any amount, including any change you could spare!" Their goal is to raise T dollars, and to donate to a cat shelter and a dog shelter.

Match each quantity to an expression, an equation, or an inequality that describes it.

- | | |
|---|-------------------------------------|
| A. The dollar amount the club would have if they reached one-fourth of their goal. | 1. $\frac{3}{4}n \cdot \frac{1}{2}$ |
| | 2. $\frac{1}{4}T$ |
| B. The dollar amount the club would have if every student at the school donated a quarter to the cause. | 3. $T - \frac{1}{4}n$ |
| | 4. $\frac{3}{4}T$ |
| C. The dollar amount the club could donate to the cat shelter if they reached their goal and gave a quarter of the total donation to a dog shelter. | 5. $\frac{1}{4}n$ |
| D. The dollar amount the club would still need to raise to reach its goal after every student at the school donated a quarter. | |
| E. The dollar amount the club would have if three-fourths of the students at the school each gave 50 cents. | |

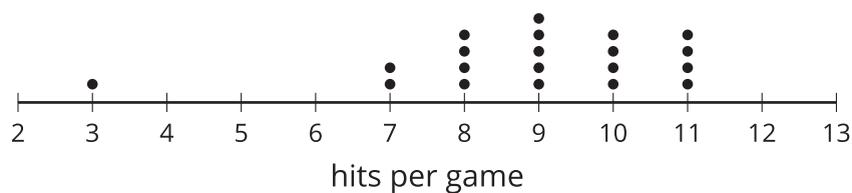
5. A softball team is ordering pizza to eat after their tournament. They plan to order cheese pizzas that cost \$6 each and four-topping pizzas that cost \$10 each. They order c cheese pizzas and f four-topping pizzas.

Which expression represents the total cost of all of the pizzas they order?

- A. $6 + 10$
 - B. $c + f$
 - C. $6c + 10f$
 - D. $6f + 10c$
6. The value of coins in the pockets of several students is recorded. What is the mean of the values: 10, 20, 35, 35, 35, 40, 45, 45, 50, 60
- A. 10 cents
 - B. 35 cents
 - C. 37.5 cents
 - D. 50 cents

(From Unit 1, Lesson 9.)

7. The dot plot displays the number of hits a baseball team made in several games. The distribution is skewed to the left.



If the game with 3 hits is considered to be recorded in error, it might be removed from the data set. If that happens:

a. What happens to the mean of the data set?

b. What happens to the median of the data set?

(From Unit 1, Lesson 10.)

8. A set of data has MAD 0 and one of the data values is 14. What can you say about the data values?

(From Unit 1, Lesson 11.)