

## Unit 6 Lesson 6 Cumulative Practice Problems

1. Instructions for a craft project say that the length of a piece of red ribbon should be 7 inches less than the length of a piece of blue ribbon.

a. How long is the red ribbon if the length of the blue ribbon is:

10 inches?

27 inches?

$x$  inches?

b. How long is the blue ribbon if the red ribbon is 12 inches?

2. Tyler has 3 times as many books as Mai.

a. How many books does Mai have if Tyler has:

15 books?

21 books?

$x$  books?

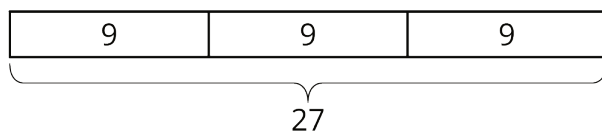
b. Tyler has 18 books. How many books does Mai have?

3. A bottle holds 24 ounces of water. It has  $x$  ounces of water in it.

a. What does  $24 - x$  represent in this situation?

b. Write a question about this situation that has  $24 - x$  for the answer.

4. Write an equation represented by this tape diagram using each of these operations.



a. addition

b. subtraction

c. multiplication

d. division

(From Unit 6, Lesson 1.)

5. Select **all** the equations that describe each situation and then find the solution.

a. Han's house is 450 meters from school. Lin's house is 135 meters closer to school. How far is Lin's house from school?

■  $z = 450 + 135$

■  $z = 450 - 135$

■  $z - 135 = 450$

■  $z + 135 = 450$

b. Tyler's playlist has 36 songs. Noah's playlist has one quarter as many songs as Tyler's playlist. How many songs are on Noah's playlist?

■  $w = 4 \cdot 36$

■  $w = 36 \div 4$

■  $4w = 36$

■  $\frac{w}{4} = 36$

(From Unit 6, Lesson 4.)

6. You had \$50. You spent 10% of the money on clothes, 20% on games, and the rest on books. How much money was spent on books?

(From Unit 3, Lesson 12.)

7. A trash bin has a capacity of 50 gallons. What percentage of its capacity is each amount? Show your reasoning.

a. 5 gallons

b. 30 gallons

c. 45 gallons

d. 100 gallons

(From Unit 3, Lesson 14.)