## Lesson 1 Practice Problems

1. Here is an equation: $x+4=17$
a. Draw a tape diagram to represent the equation.
b. Which part of the diagram shows the quantity $x$ ? What about 4 ? What about 17 ?
c. How does the diagram show that $x+4$ has the same value as 17 ?
2. Diego is trying to find the value of $x$ in $5 \cdot x=35$. He draws this diagram but is not certain how to proceed.

| $x$ | $x$ | $x$ | $x$ | $x$ |
| :--- | :--- | :--- | :--- | :--- |

a. Complete the tape diagram so it represents the equation $5 \cdot x=35$.
b. Find the value of $x$.
3. Match each equation to one of the two tape diagrams.
a. $x+3=9$
b. $3 \cdot x=9$
c. $9=3 \cdot x$
d. $3+x=9$
e. $x=9-3$
f. $x=9 \div 3$
g. $x+x+x=9$

A


B

4. For each equation, draw a tape diagram and find the unknown value.
a. $x+9=16$
b. $4 \cdot x=28$
5. A shopper paid $\$ 2.52$ for 4.5 pounds of potatoes, $\$ 7.75$ for 2.5 pounds of broccoli, and $\$ 2.45$ for 2.5 pounds of pears. What is the unit price of each item she bought? Show your reasoning.
(From Unit 5, Lesson 13.)
6. A sports drink bottle contains 16.9 fluid ounces. Andre drank $80 \%$ of the bottle. How many fluid ounces did Andre drink? Show your reasoning.
(From Unit 3, Lesson 14.)
7. The daily recommended allowance of calcium for a sixth grader is $1,200 \mathrm{mg}$. One cup of milk has $25 \%$ of the recommended daily allowance of calcium. How many milligrams of calcium are in a cup of milk? If you get stuck, consider using the double number line.

(From Unit 3, Lesson 11.)

