

Lesson 5: Practice Problems

1. Here are some prices customers paid for different items at a farmer's market. Find the cost for 1 pound of each item.

- a. \$5 for 4 pounds of apples
- b. \$3.50 for $\frac{1}{2}$ pound of cheese

- c. \$8.25 for $1\frac{1}{2}$ pounds of coffee beans
- d. \$6.75 for $\frac{3}{4}$ pounds of fudge
- e. \$5.50 for a $6\frac{1}{4}$ pound pumpkin

2. Find the products.

a. $\frac{2}{3} \cdot (\frac{-4}{5})$

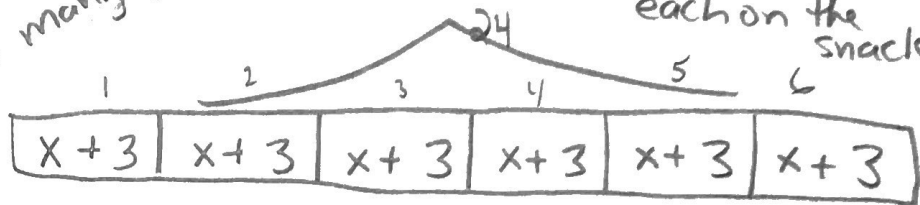
b. $(\frac{-5}{7}) \cdot (\frac{7}{5})$

c. $(\frac{-2}{39}) \cdot 39$

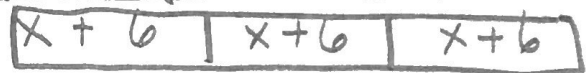
d. $(\frac{2}{5}) \cdot (\frac{-3}{4})$

Handwritten notes:
 X? = each ticket
 How many groups? (6)
 Why each + 3? They spent \$3 each on the snack

3. Here are two stories:



- o A family buys 6 tickets to a show. They also each spend \$3 on a snack. They spend \$24 on the show.
- o Diego has 24 ounces of juice. He pours equal amounts for each of his 3 friends, and then adds 6 more ounces for each.



Here are two equations:

$3(x + 6) = 24$ Juice

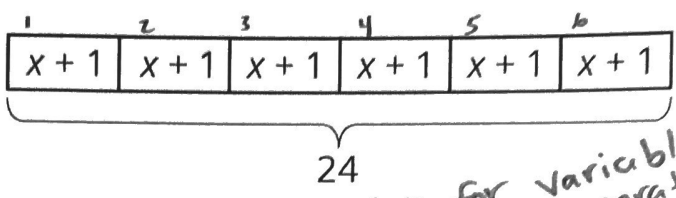
$6(x + 3) = 24$ Movie tickets

- a. Which equation represents which story?
- b. What does x represent in each equation?
- c. Find the solution to each equation. Explain or show your reasoning.
- d. What does each solution tell you about its situation?

Handwritten notes:
 Why 3 boxes? 3 friends
 X? = ounces of juice
 Why +6 for each? adds 6 ounces for each friend

4. Here is a diagram and its corresponding equation. Find the solution to the equation and explain your reasoning.

How many x's? 6
 How many groups? 6



* To solve for variable do opposite operation

$$\begin{aligned}
 & \overset{x}{\curvearrowright} \\
 & 6(x + 1) = 24 \\
 & 6x + 6 = 24 \quad \leftarrow + \rightarrow - \\
 & \quad -6 \quad -6 \\
 & 6x = 18 \quad \leftarrow x \rightarrow \div \\
 & \quad \div 6 \quad \div 6 \\
 & \quad \quad \quad \boxed{x = 3}
 \end{aligned}$$

5. Below is a set of data about temperatures. The *range* of a set of data is the distance between the lowest and highest value in the set. What is the range of these temperatures?

9°C, -3°C, 22°C, -5°C, 11°C, 15°C

6. A store is having a 25% off sale on all shirts. Show two different ways to calculate the sale price for a shirt that normally costs \$24.

