

Unit 5 Lesson 13 Cumulative Practice Problems

1. The value of x is $\frac{-1}{4}$. Order these expressions from least to greatest:

x

$1 - x$

$x - 1$

$-1 \div x$

2. Here are four expressions that have the value $\frac{-1}{2}$:

$\frac{-1}{4} + \left(\frac{-1}{4}\right)$

$\frac{1}{2} - 1$

$-2 \cdot \frac{1}{4}$

$-1 \div 2$

Write five expressions: a sum, a difference, a product, a quotient, and one that involves at least two operations that have the value $\frac{-3}{4}$.

3. Find the value of each expression.

a. $-22 + 5$

b. $-22 - (-5)$

c. $(-22)(-5)$

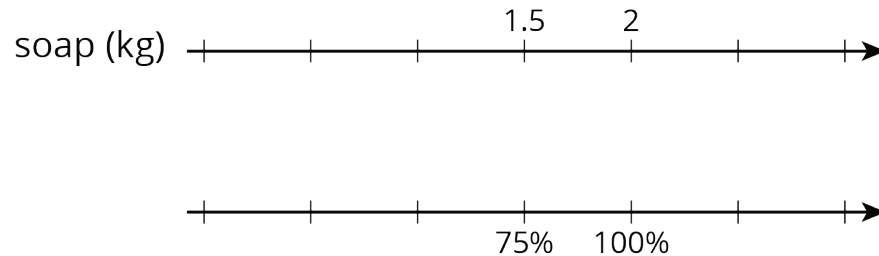
d. $-22 \div 5$

4. The price of an ice cream cone is \$3.25, but it costs \$3.51 with tax. What is the sales tax rate?

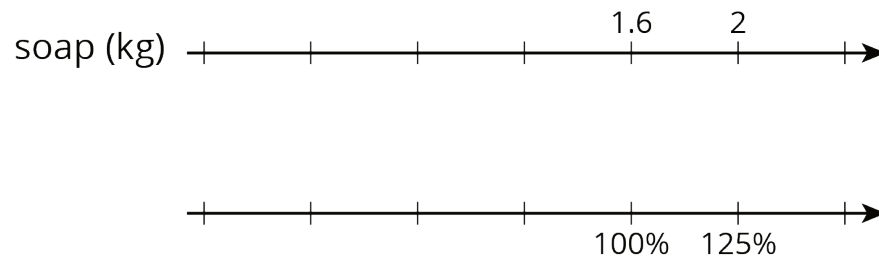
(From Unit 4, Lesson 10.)

5. Two students are both working on the same problem: A box of laundry soap has 25% more soap in its new box. The new box holds 2 kg. How much soap did the old box hold?

◦ Here is how Jada set up her double number line.



◦ Here is how Lin set up her double number line.



Do you agree with either of them? Explain or show your reasoning.

(From Unit 4, Lesson 7.)

6. a. A coffee maker's directions say to use 2 tablespoons of ground coffee for every 6 ounces of water. How much coffee should you use for 33 ounces of water?

b. A runner is running a 10 km race. It takes her 17.5 minutes to reach the 2.5 km mark. At that rate, how long will it take her to run the whole race?

(From Unit 4, Lesson 3.)