Curated Practice Problem Set

Unit 5 Lesson 10 Cumulative Practice Problems

1. Evaluate each expression:

    a. $-12 \cdot \frac{1}{3}$

    b. $-12 \cdot -\frac{1}{3}$

    c. $12 \cdot \left(-\frac{5}{4}\right)$

    d. $-12 \cdot \left(-\frac{5}{4}\right)$

2. Evaluate each expression:

    a. $-1 \cdot 2 \cdot 3$

    b. $-1 \cdot (-2) \cdot 3$

    c. $-1 \cdot (-2) \cdot (-3)$

3. Order each set of numbers from least to greatest.

   a. 4, 8, -2, -6, 0

   b. -5, -5.2, 5.5, $-5\frac{1}{2}, \frac{-5}{2}$

(From Unit 5, Lesson 1.)

4. $30 + -30 = 0$.

     a. Write another sum of two numbers that equals 0.

     b. Write a sum of three numbers that equals 0.

     c. Write a sum of four numbers that equals 0, none of which are opposites.

(From Unit 5, Lesson 3.)

5. A submarine is searching for underwater features. It is accompanied by a small aircraft and an underwater robotic vehicle.

At one time the aircraft is 200 m above the surface, the submarine is 55 m below the surface, and the underwater robotic vehicle is 227 m below the surface.

     a. What is the difference in height between the submarine and the aircraft?

     b. What is the distance between the underwater robotic vehicle and the submarine?

(From Unit 5, Lesson 6.)

6.   a. Clare is cycling at a speed of 12 miles per hour. If she starts at a position chosen as zero, what will her position be after 45 minutes?

          b. Han is cycling at a speed of -8 miles per hour; if he starts at the same zero point, what will his position be after 45 minutes?

          c. What will the distance between them be after 45 minutes?

(From Unit 5, Lesson 8.)

7. Fill in the missing numbers in these equations

    a. $(-7) \cdot ? = -14$

    b. $? \cdot 3 = -15$

    c. $? \cdot 4 = 32$

    d. $-49 \cdot 3 = ?$

(From Unit 5, Lesson 9.)