1. What is the result when $\frac{3}{8}x + 2\frac{1}{5}$ is subtracted from $3\frac{1}{2}x - 4\frac{1}{10}$?

2. Which of these shows $\dfrac{-2(18x - 6y)}{-4}$ simplified?

   A. $(9x - 3y)$

   B. $(-9x + 3y)$

   C. $(16x - 8y)$

   D. $(36x - 12y)$

3. Simplify: $8x - 11v + 17x + 5v$?

4. Simplify: $4r + 5s - 16r + 3s$?

5. Simplify: $^-0.25(x - 6) - (0.5x + 2)$?

6. Simplify: $4(x - \frac{2}{3})$?

7. The production cost to make 10 shirts is modeled by the expression 1.8y + 5.5 where $y$ represents the number of meters of fabric needed to make the shirts. Which expression represents the production cost for one shirt?

   A. $0.18y + 0.55$

   B. $0.18y + 5.5$

   C. $1.8y + 0.55$

   D. $18y + 55y$

8. Simplify: $5(x + 2) - 7(x + 2)$?

9. Which of these expressions is equivalent to $6x - 10x + 20$?

   A. $2(3x + 5)$

   B. $4(5 - x)$

   C. $4(x - 5)$

   D. $16x$

10. Simplify: $^-1.42(3x - 5)$

11. Which expression is not equivalent to $4 \times \frac{3}{8}$?

    A. $4 \times \left(3 \times \frac{1}{8}\right)$

    B. $(4 \times 3) \times \frac{1}{8}$

    C. $\left(4 \times \frac{1}{8}\right) \times 3$

    D. $(4 \times 3) \times \left(4 \times \frac{1}{8}\right)$

12. Simplify: $\frac{2}{3}(2x - 9)$

**13.** Simplify: $(6p + x + 2) + (3p - 3x - 5)$

**14.** Simplify: $\dfrac{-2}{9}x - \dfrac{1}{3}\left(6 - 3\dfrac{2}{3}x\right)$

**15.** Simplify: $\dfrac{2}{3}(12x + 6) - \dfrac{1}{2}(4x + 6)$?

**16.** Which answer shows the factored form of $-8wx + 2wz - 6w$?

**A.** $-12(w + x + z)$     **B.** $2w(4x - z + 3)$     **C.** $-8w(x + 2z - 6)$     **D.** $-2w(4x - z + 3)$

**17.** Which expression is equal to the following expression? $-\dfrac{5}{6}x - 4\left(\dfrac{3}{8}x + \dfrac{5}{4}y\right)$

**A.** $-\dfrac{7}{3}x + \dfrac{5}{4}y$     **B.** $-\dfrac{7}{3}x - 5y$     **C.** $-\dfrac{29}{16}x - 20y$     **D.** $-\dfrac{29}{16}x + \dfrac{5}{4}y$

**18.** A boat rental company has two kinds of boats, rowboats and motorboats. The expressions below represent the cost, in dollars, for renting each kind of boat for x number of hours.

Cost of a rowboat rental: $8.50x + 3$

Cost of a motorboat rental: $17.50x + 25$

Which expression shows how many more dollars it costs to rent a motorboat than a rowboat for *x* hours?

**A.** $8x + 22$     **B.** $9x + 22$     **C.** $9x + 28$     **D.** $26x + 28$

**19.** The Erie Canal in the United States is 60 miles longer than 3 times the length of the Suez Canal in Egypt. If the length of the Suez Canal is represented by the variable *x*, which expression below best represents the length of the Erie Canal?

**A.** $60(3x)$     **B.** $3x + 60$     **C.** $3x \div 60$     **D.** $60 + 3 + x$

**20.** What is the value of the expression $7\dfrac{3}{5} + {}^{-}8\dfrac{4}{7}$?