



Unit 3: Cumulative Review

1. Use three successive unit multipliers to convert from 156,000 centimeters to miles. First convert from centimeters to inches, then from inches to feet, and finally from feet to miles. (1 in = 2.54 cm, 12 in = 1 ft, 5280 ft = 1 mi)

2. Simplify this expression:
 $1 + 8 \cdot 6 \div 2 - 10$

3. Simplify $\frac{10 \cdot 2 + 1 \cdot 12}{1 + 2 \cdot 3 - 3}$

4. Simplify $|8 - 6 - 5|$

5. What is the opposite of 10? What is the absolute value of the opposite of 10?

6. Simplify $-3(-4)(-2) + 1$

7. Simplify $-200/(-4)/(-25)$

8. Evaluate $|3x - 2y + 1|$ if $x = 2$ and $y = -6$.

9. Simplify $3x + 2 - 11x + 9$ and then evaluate when $x = -1$.

10. Simplify $(\frac{1}{2})x - (\frac{1}{5})x + (\frac{2}{7})y - (\frac{3}{8})y$

11. Solve $8 = -6k - 4 + 2k$

12. Solve $-9 + 6x + 1 + 14x = 32$

13. Solve $6(y + 4) - 4 = y - 9(3y + 2)$

14. Simplify $\frac{1}{2} + \frac{1}{3} - \frac{1}{4} + 2$