Expressions

1. Label as an equation or expression.

   a. $2x - 3 = 8 + x$ **b.** $y^2 - 9$ **c.** $4 + 2 = 6$ **d.** $\frac{1}{2}x^4 - 5$ **e.** $\frac{T + 2D}{C}$

2. Label as a variable, term, or coefficient.

   a. $7x$ **b.** $4xy^3$ **c.** z **d.** $\frac{2}{5}x^2$ **e.** $8y$

3. Fill in the blanks with one of the words: 'an expression', 'an equation', or 'a variable'. Give an example of each.

   _____ always has an equal sign ('=').

   _____ is denoted by a single letter.

   _____ consists of variables, numbers, and operations.

4. Find the value of the expressions. Simplify first.

   a. $\frac{8 \times 12}{2}$ **b.** $\frac{33}{3} \times \frac{8}{16}$ **c.** $\frac{21 \times 6}{2 \times 14}$ **d.** $\frac{462}{2} \times 120 - 500$

5. Find the value of the expressions.

   a. $2x + 18$ for $x = 5$ **b.** $\frac{355}{z} \times 13$ for $z = 5$ **c.** $20 + \frac{2y + 1}{3}$ for $y = 10$ **d.** $x^2 - 2x + 9$ for $x = 5$.

6. Fill in the table by using the formula to convert each temperature from Celsius to Fahrenheit.

Temperature in °C	Formula $F = \frac{9}{5}C + 32$	Temperature in °F
a. 10°		
b. 25°		
c. 7°		

7. Write an expression for each scenario, then find its value.

   a. 22 more than 28.

   b. The difference between 1,200 and 300, multiplied by 30.

   c. The sum of 3.5 and 4.2 divided by 7.

   d. 3.04 more than the product of 7.98 and 2.