1. 4. If a triangle has angles 30°, 60°, and 90°, what type of triangle is it?

A. Equilateral

B. Isosceles

C. Scalene

D. Right-angled

Solution: A triangle with a 90° angle is a right-angled triangle.

2. 2. Find the value of y if $2y - 3 = 9$.

A. $y = 3$

B. $y = 6$

C. $y = 8$

D. $y = 7$

Solution: $2y - 3 = 9$

$2y = 9 + 3$

$2y = 12$

$y = 12 / 2$

$y = 6$

3. 3. What is the value of x in the equation $x^2 - 5x + 6 = 0$?

A. $x = 2, x = 3$

B. $x = -2, x = -3$

C. $x = 1, x = 6$

D. $x = 0, x = 5$

Solution: Factor the quadratic equation: $(x - 2)(x - 3) = 0$

$x = 2$ or $x = 3$

4. 5. Simplify: 4x - 3(2x - 5).

A. 2x + 15

B. -2x + 15

C. 4x - 15

D. 2x - 15

Solution: 4x - 3(2x - 5) = 4x - 6x + 15 = -2x + 15

5. 1. If 3x + 4 = 19, find the value of x.

A. x = 3

B. x = 5

C. x = 7

D. x = 6

Solution: 3x + 4 = 19

3x = 19 - 4

3x = 15

x = 15 / 3

x = 5