

## Quiz 2.1

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**Solve each equation.**

1)  $5m - 16 = 1 + 4(1 + 3m)$

- A)  $\{-4\}$       B)  $\{-14\}$   
C)  $\{-5\}$       D)  $\{-3\}$

2)  $5(1 + 2r) = -7r - 29$

- A)  $\{-10\}$       B)  $\{-2\}$   
C)  $\{-3\}$       D)  $\{4\}$

3)  $6n + 7n = 2(7n - 4) - (-8 - 3n)$

- A)  $\{-3\}$   
B)  $\{7\}$   
C)  $\{0\}$   
D)  $\{ \text{All real numbers.} \}$

4)  $2(7 + 4x) = 2x - 8(x + 7)$

- A)  $\{-6\}$       B)  $\{-3\}$   
C)  $\{8\}$       D)  $\{-5\}$

**Solve each proportion.**

5)  $x - 2 = \frac{5x + 2}{2}$

- A)  $\{5\}$       B)  $\{8.7\}$   
C)  $\{9\}$       D)  $\{-2\}$

**Solve each equation.**

6)  $26.63 + 5.4r = -2.8(3.7 - 5.4r) + 3.98r$

- A)  $\{4.152\}$       B)  $\{-11.2\}$   
C)  $\{2.7\}$       D)  $\{-7.9\}$

**Find the mistake that was made when solving each equation. Explain why the work shown is incorrect. Solve each equation correctly.**

7)  $-3(2 - 6x) = 84$   
 $-6 - 18x = 84$   
 $-18x = 90$   
 $x = -5$

A) {No mistakes,  $-5$ }

B) {Divided incorrectly,  $0.5$ }

C) { Added to both sides incorrectly,  $\frac{13}{3}$  }

D) {Distributed incorrectly,  $5$ }

8)  $-143 = 5(5n - 1) - 2n$   
 $-143 = 25n - 5 - 2n$   
 $-143 = 23n - 5$   
 $-148 = 23n$   
 $-6.435 = n$

A) {Distributed incorrectly,  $-5$ }

B) {Combined like terms incorrectly,  $-6$ }

C) {Subtracted incorrectly,  $-6$ }

D) { Divided incorrectly,  $-5$  }