

Homework 2.3

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Solve each equation.

1) $38 + 2n = 6(3n + 1)$

2) $-2b + 2(3b + 3) = -18 + b$

3) $5x - 24 = -2(-4x - 8) + 5x$

4) $-2(7m + 1) = -6(3m - 5)$

5) $v - 4(v + 4) = 4v - 8(2 - 8v)$

6) $8(6 + 4x) = 4(6x + 4)$

Solve each proportion.

7) $\frac{-p - 10}{2} = -p - 1$

8) $3a + 4 = \frac{2a - 16}{3}$

9) $\frac{8k - 2}{5} = 2k - 1$

Solve each equation.

10) $-2.1m + 3.5(4.3m - 0.6) = -27.4764 + 5m$

11) $-13.964 + 0.4n = -5.9(2 + 3.6n)$

12) $-4.944 - 0.3x = -5.9x - 3.2(1.8 - 1.9x)$

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

13) $-84 = -6(4r - 2)$
 $-84 = -24r - 12$
 $-72 = -24r$
 $3 = r$

14) $2 - 4(1 + 3n) = 70$
 $2 - 4 - 12n = 70$
 $6 - 12n = 70$
 $-12n = 64$
 $n = -\frac{16}{3}$

15) $-5(-3 + 2x) = 65$
 $15 - 10x = 65$
 $-10x = 50$
 $x = -500$

Answers to Homework 2.3

1) $\{2\}$

5) $\{0\}$

9) $\{\frac{3}{2}\}$

13) $\{4\}$

2) $\{-8\}$

6) $\{-4\}$

10) $\{-3.192\}$

14) $\{-6\}$

3) $\{-5\}$

7) $\{8\}$

11) $\{\frac{1}{10}\}$

15) $\{-5\}$

4) $\{8\}$

8) $\{-4\}$

12) $\{1.7\}$