4.2 – Solve Multi-Step Equations Worksheet #1

MPM1D

1. Solve

a) $3 + 4m + 5m = 21$

b) $16y - 8 - 9y = 27$

c) $46 = 2 - 8w - 3w$

d) $3d + 4 - 9d + 12 = 0$

2. Solve

a) $5x + 9 = 3x + 7$

b) $-2u - 8 = 5u - 1$

c) $4y - 13 = -6y + 7$

d) $7 - 5m = -2 - 2m$

3. Solve

a) $0 = 14 - x + 6x - 9$

b) $11 - n + 3 = 3n + 3n$

c) $4t - 5 = 2t + 5$

d) $6k - 3 - 2k = k - 3$

4. Find the root of each equation

a) $2(x - 2) = 4x - 2$

b) $4c + 3 = 3(c - 4)$

c) $6p + 4(8 - p) = 22$

d) $k = 2(11 - k) + 14$

5. Find the root of each equation

a) $2(x - 3) + 3(x - 2) = 18$

b) $4(y - 1) - (y - 5) = 10$

c) $2(c + 2) = 5(c + 1) - 7$

d) $3(t - 4) = -2(t + 3) + 14$

9. Solve each equation. Express fraction answers in lowest terms.

a) $3x - 8 = 7x + 10$
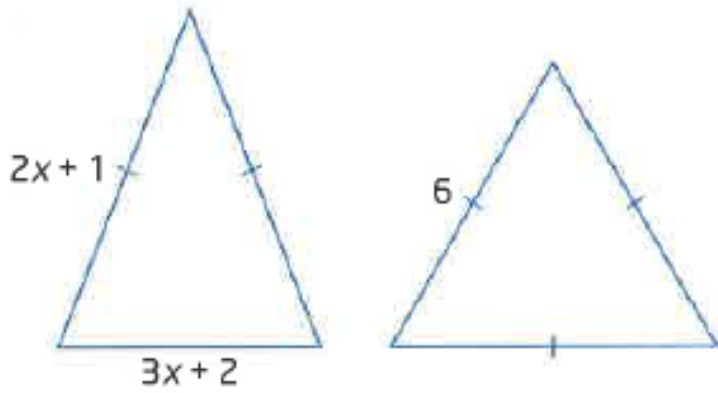
b) $3 + 10i = 4i - 18$

c) $-4(u + 6) = 2(3u - 4)$

d) $4(k - 3) = 2 - (2k - 6)$

e) $3(p + 7) - (4p - 1) = -5(2p - 3) + 1$

f) $8 - (3w - 2) = -5(w - 3) - (4w - 3)$

13. An isosceles triangle and an equilateral triangle have the same perimeter. Find the side lengths of each triangle.

Get Ready for Tomorrow:

17. Solve each equation

a) $\frac{1}{2}(x + 6) = 4(x - 2)$

b) $\frac{1}{3}k + \frac{1}{2} = \frac{1}{4}k$