Name: _____   Date: _____

Practice: Solve Multi-Step Equations

1. Solve.
  a) $6x + 3 + 2x = 19$
  b) $10m - 3m + 8 = 43$
  c) $4a + a + 9 = 44$
  d) $15 - 3b + b = 3$
  e) $2y + 4 + 3y = 9$
  f) $7f - 12 + f = 20$
  g) $9q + 2 - 8q - 13 = 0$
  h) $8 - 3k + 5k = 0$

2. Find each root.
  a) $3b + 4 = 2b + 6$
  b) $7p - 18 = 3p - 2$
  c) $2x + 4 = 5x - 5$
  d) $8g + 3 = g + 10$
  e) $6h - 5 = 2h + 3$
  f) $4m - 9 = m + 7$
  g) $5r - 6 = 2r + 3$
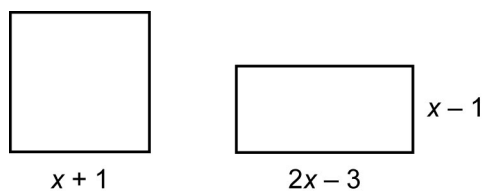 **h)** $-3y + 15 = y - 13$

3. Solve.
  a) $4(x - 3) = 3x - 7$
  b) $2(a - 8) + 3(a + 6) = 17$
  c) $3(2p + 1) = 5(p + 1)$
  d) $5d = 4(d + 2)$
  e) $2(3t + 5) - 4(2t - 1) = 6$
  f) $5(k + 3) = 2(4k + 7) - 5$

4. Solve, then check.
  a) $2m + 1 - m = 4$
  b) $q + 4 + 2q - 19 = 0$
  c) $g - 3 + 4g = 2g - 6$
  d) $2(2b + 7) = 3(b + 3) + 3$

5. A square and a rectangle have the same perimeter. Find the side lengths of each figure.

$x + 1$ $2x - 3$ $x - 1$

6. In a triangle, the measure of the middle angle is triple the measure of the smallest angle, and the measure of the largest angle is 55° greater than the measure of the smallest angle. Find the measures of the angles.