**Study Guide (Solving Quadratic Equations by Factoring)**

Simplify. Make sure all exponents are positive.

1. (x5y6)-1 · (y4z8)3

Solve each equation. Show all of your work.

1. 4(2a + 3) = -3(a – 1) + 31

Factor.

1. p2 – 5p – 14
2. 5p2 – p – 18
3. 3x2 + 6x – 24

Factor and solve the equations.

1. n2 + 7n + 15 = 5
2. x2 + 3x – 12 = 6
3. 6w2 – 18w – 18 = 6