

## Things You Should Be Good At!

Date \_\_\_\_\_ Period \_\_\_\_\_

**Factor each COMPLETELY. Don't forget to look for the GCF first.**

1)  $n^2 - 18n + 81$

2)  $k^2 - 5k - 24$

3)  $p^3 - 4p$

4)  $3v^2 + 6v - 9$

5)  $5x^3 - 5x^2$

6)  $5x^2 + 29x + 20$

7)  $7n^2 + 23n + 6$

8)  $3v^2 - 17v + 10$

9)  $6k^2 - 13k + 6$

10)  $6p^2 + 5p - 6$

**Solve each equation with the QUADRATIC FORMULA.**

$$11) \quad 2r^2 - 4r + 7 = 0$$

$$12) \quad b^2 - b + 2 = 0$$

**Simplify square roots. NO decimal answers.**

$$13) \quad \sqrt{50}$$

$$14) \quad \sqrt{72}$$

$$15) \quad \sqrt{27}$$

$$16) \quad \sqrt{180}$$

$$17) \quad \sqrt{20}$$

$$18) \quad \sqrt{80}$$

$$19) \quad \sqrt{8x^2y^2z}$$

$$20) \quad \sqrt{54n^2}$$

**Solve each equation by taking square roots. (SQUARE ROOT METHOD)**

$$21) \quad 8m^2 = 440$$

$$22) \quad n^2 + 7 = 82$$

$$23) \quad 5b^2 + 4 = 139$$

$$24) \quad 7k^2 - 4 = 563$$