Name _____ Date _____
Mr. Schlansky Geometry

Algebra I Practice for Geometry

Reducing Radicals

1) **Separate into two radicals (perfect squares and non perfect squares). Find the largest perfect square that divides in**
2) **Take the square root of the perfect square. Bring the non-perfect square down**

1. $\sqrt{45}$
2. $\sqrt{50}$
3. $\sqrt{162}$
4. $\sqrt{32}$
5. $\sqrt{48}$
6. $\sqrt{75}$
7. $\sqrt{48}$
8. $\sqrt{200}$
9. $\sqrt{98}$
10. $\sqrt{125}$
11. $\sqrt{147}$
12. $\sqrt{192}$

Solving Quadratic Equations

1) **Bring everything to one side**
2) **Factor**
3) **Set each factor equal to zero**

1. $y^2 - 5y - 6 = 0$

2. $x^2 + 4x = 45$

3. $a^2 - 8a = 20$

4. $n^2 = 3n + 18$

5. $x^2 - 7x = 3x - 16$

6. $x(x-2) = 3(x+8)$

In Terms of x

1) **Call the last thing x**
2) **Express everything else in terms of x**

1. Jamie is 5 years older than her sister Amy. If the sum of their ages is 19, how old is Jamie?

2. Jack's age is 6 less than double Jill's age. If the sum of their ages is 30, how old is Jill?

3. Ben has four more than twice as many CDs as Jake. If they have a total of 31 CDs, how many CDs does Jake have?

4. Three times as many robins as cardinals visited a bird feeder. If a total of 20 robins and cardinals visited the feeder, how many were robins?