

PreAP Algebra 2--work in your composition notebook Name \_\_\_\_\_

## Simplifying Radicals and Solving Quadratic EQs Date \_\_\_\_\_

### Simplify.

$$1) 6\sqrt{36}$$

$$3) 2\sqrt{54}$$

$$5) 2\sqrt{24}$$

$$7) -\sqrt{80}$$

$$9) -2\sqrt{216}$$

$$2) -2\sqrt{125}$$

$$4) -3\sqrt{144}$$

$$6) -5\sqrt{27}$$

$$8) -4\sqrt{64}$$

$$10) -3\sqrt{50}$$

Solve each equation by taking square roots.

$$11) \frac{3x^2 + 4}{2} = 56$$

$$12) 4(n^2 + 2) = 152$$

$$13) 8k^2 + 10 = 810$$

$$14) \frac{8(x^2 - 1)}{3} = 264$$

$$15) \frac{49v^2 + 9}{3} = 15$$

$$16) 6 - 8n^2 = -482$$

$$17) 4x^2 + 6 = 7$$

$$18) 5(2x^2 + 1) = 199$$

$$19) 2(5k^2 - 4) = 242$$

$$20) 7 - 6a^2 = -353$$