

Trig 2-6 Solving Quadratics

Name: _____

Time> Start: _____ Finish: _____ Total Time = _____

Solve these quadratic equations by factoring.

1. $5x^2 + 13x + 6 = 0$

2. $4x^2 + 16x + 15 = 0$

3. $30x^2 - x - 3 = 0$

4. $x^2 + 2x + 1 = 0$

5. $6x^2 + 23x + 20 = 0$

6. $8x^2 + 17x + 2 = 0$

Solve these quadratic equations using the quadratic formula, which always works unlike factoring.

Remember $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

7. $2x^2 + 8x + 5 = 0$

8. $5x^2 + 2x - 6 = 0$

SAT Questions

- _____ 9. In a certain game, each of 5 players received a score between 0 and 100, inclusive. If their average (arithmetic mean) score was 80, what is the greatest possible number of the 5 players who could have received a score of 50?
A. None B. One C. Two D. Three E. Four
- _____ 10. When the positive integer k is divided by 7, the remainder is 6. What is the remainder when $k + 2$ is divided by 7?
A. 0 B. 1 C. 2 D. 3 E. 4
- _____ 11. If $3^{y+4} = 81$, what is the value of y ?
- _____ 12. If a and b are positive integers and $ab = 64$, what is the smallest possible value of $a + b$?