Integrated Math 2   Worksheet 08.2c   Name: _____
                   (Day 3) Factoring Trinomials $(a \neq 1)$

Solve the following quadratic equations.

1. $(2x - 3)(3x + 1) = 0$

2. $(5x + 2)(9x + 2) = 0$

3. $6x^2 + 5x + 1 = 0$

4. $3x^2 + 11x + 10 = 0$

5. $4x^2 - 8x + 3 = 0$

6. $6x^2 - 11 + 3 = 0$

7. $6x^2 + 28x - 2 = 2x - 10$

8. $-6x^2 + 2 = 17x - 12$

9. $-5x^2 - 1 = 10x^2 - 11x + 1$

10. $4x^2 - 10x = -4x^2 + 3$

(Day 3) Factoring Trinomials $(a \neq 1)$

A race car driving under the caution flag at 80 feet per second begins to accelerate at a constant rate after the warning flag. The distance traveled since the warning flag in feet is characterized by $d = 30t^2 + 80t$, where d is the distance traveled in feet and t is the time in seconds after the car starts accelerating again.

11. How long does it take the car to travel 30 feet after it begins accelerating?

12. How long will the car take to travel 160 feet.