9-4 Skills Practice

Factoring Trinomials: ax² + bx + c

Factor each trinomial, if possible. If the trinomial cannot be factored using integers, write *prime*.

1. $2x^2 + 5x + 2$

2. $3n^2 + 5n + 2$

3. $2s^2 + 9s - 5$

4. $3g^2 - 7g + 2$

5. $2t^2 - 11t + 15$

~~**6.**~~ $2x^2 + 3x - 6$ **PRIME**

7. $2y^2 + y - 1$

8. $4h^2 + 8h - 5$

~~**9.**~~ $4x^2 - 3x - 3$ **PRIME**

10. $4b^2 + 15b - 4$

11. $9p^2 + 6p - 8$

12. $6q^2 - 13q + 6$

13. $3a^2 + 30a + 63$

14. $10w^2 - 19w - 15$

Solve each equation. Check your solutions.

15. $2x^2 + 7x + 3 = 0$

16. $3w^2 + 14w + 8 = 0$

All work on looseleaf.

Use the "FAST" method ==> find 2 magic numbers whose sum is "b" and whose product is "ac". Then split the middle term up using the magic numbers to make a 4 term polynomial, then FBG (factor by grouping).

Do not work # 6 or #9, they are Prime ==> you cannot find the "magic numbers" for these trinomials, they do not exist.

When changing a flat tire, loosen the lug nuts before jacking up the car.

Mr. C.