Algebra 1
Unit 6 Worksheet 6

Name:_____
Date:_____
Period:_____

Directions: Please answer the following questions. **Show work!!**

1. In your own words, describe how to factor by removing the GCF.

2. In your own words, describe how to factor by grouping.

3. In your own words, describe how to factor $x^2 + bx + c$.

4. In your own words, describe how to factor $ax^2 + bx + c$.

Factor by grouping.

5. $4x^2 + x - 24x - 6$

6. $m^3 - 5m^2 + 2m - 10$

Factor the trinomial.

7. $m^2 + m - 20$

8. $z^2 - 12z + 32$

9. $x^2 - 81$

10. $n^2 - 23n - 50$

I have made a mistake here and cannot find it. Please CIRCLE my error and then FIX IT off to the right, showing me what the correct work should be.

11. INCORRECT WORK

$(5x - 4)(x + 9)$

$5x + 45x - 4x - 36$

$46x - 36$

CORRECT WORK

12. INCORRECT WORK

$(2x + 9)(3x - 5)$

$6x^2 - 10x + 27x - 45$

$6x^2 + 37x - 45$

CORRECT WORK

13. On tax-free weekend, I went shopping. I purchased several shirts that were on sale for \$12.49 each, as well as a jacket for \$19.99. The following equation represents my situation that day.

$$12.49x + 19.99 = 107.42$$

a) What vocabulary word does the \$19.99 represent?

b) What vocabulary word does the \$12.49 represent?

c) What does \$107.42 mean in context of the situation?