

Factoring Completely Homework

Name: _____

Date: _____

Algebra 1

Band: _____

LT#7: Factor trinomials of the form $ax^2 + bx + c$.

Factor completely.

1. $6x^2 - 10x - 4$

2. $6d^2 + 21d + 15$

3. $8n^2 + 68n + 84$

4. $20p^2 - 115p - 30$

5. $15r^2 + 141r - 90$

6. $12z^2 - 14z + 4$

7. $20k^2 + 110k + 120$

8. $9m^2 - 66m + 21$

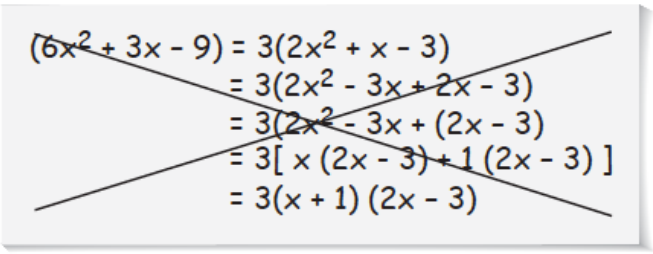
9. $40x^2 - 136x - 96$

10. $2y^2 + 28y - 14$

11. $8t^2 - 6t - 90$

12. $24c^2 + 96c + 90$

13. Describe and correct the error made in factoring the expression.


$$\begin{aligned} \cancel{(6x^2 + 3x - 9)} &= \cancel{3(2x^2 + x - 3)} \\ &= \cancel{3(2x^2 - 3x + 2x - 3)} \\ &= \cancel{3(2x^2 - 3x + (2x - 3))} \\ &= \cancel{3[x(2x - 3) + 1(2x - 3)]} \\ &= \cancel{3(x + 1)(2x - 3)} \end{aligned}$$