

Name _____

Factoring

Factor each of the following expressions.

1. $x^2 + 8x + 7$

2. $x^2 + 12x + 32$

3. $x^2 - 6x - 72$

4. $x^2 - 33x + 90$

5. $x^2 + x - 20$

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

7. $x^2 + 15x + 36$

8. $x^2 - 9x + 14$

9. $x^2 + 13x - 30$

10. $x^2 + 19x + 18$

11. $x^2 + 10x + 24$

12. $x^2 - 19x + 48$

13. $4x^2 + 44x + 120$

14. $2x^2 + 6x - 56$

15. $3x^2 - 18x - 165$

16. Pete made a mistake when he tried to factor the expression: $x^2 + 2x - 35$
He factored it as: $(x - 7)(x + 5)$

Fix Pete's mistake.

Factoring Answers

Factor each of the following expressions.

1. $x^2 + 8x + 7$

$$(x + 7)(x + 1)$$

2. $x^2 + 12x + 32$

$$(x + 8)(x + 4)$$

3. $x^2 - 6x - 72$

$$(x - 12)(x + 6)$$

4. $x^2 - 33x + 90$

$$(x - 30)(x - 3)$$

5. $x^2 + x - 20$

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

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

$$(x + 6)(x - 4)$$

7. $x^2 + 15x + 36$

$$(x + 12)(x + 3)$$

8. $x^2 - 9x + 14$

$$(x - 7)(x - 2)$$

9. $x^2 + 13x - 30$

$(x + 15)(x - 2)$

10. $x^2 + 19x + 18$

$(x + 18)(x + 1)$

11. $x^2 + 10x + 24$

$(x + 6)(x + 4)$

12. $x^2 - 19x + 48$

$(x - 16)(x - 3)$

13. $4x^2 + 44x + 120$

$4(x + 5)(x + 6)$

14. $2x^2 + 6x - 56$

$2(x + 7)(x - 4)$

15. $3x^2 - 18x - 165$

$3(x - 11)(x + 5)$

16. Pete made a mistake when he tried to factor the expression: $x^2 + 2x - 35$

He factored it as: $(x - 7)(x + 5)$

Fix Pete's mistake.

$(x + 7)(x - 5)$