

Name _____

Date _____

Introduction to Factoring

I used the distributive property below. Find the missing number that I distributed to get my answer.

1) $?(x + 6)$

$3x + 18$

2) $?(m + 8)$

$9m + 72$

3) $?(g - 4)$

$4g - 16$

4) $?(2x + 3)$

$16x + 24$

5) $?(5n - 7)$

$40n - 56$

6) $?(3d + 4)$

$9d + 12$

I used the distributive property below. Find the missing number that I distributed to get my answer.

1) $3x + 21$

$?(x + 7)$

2) $4t - 44$

$?(t - 11)$

3) $5h - 60$

$?(h - 12)$

4) $22x + 33$

$?(2x + 3)$

5) $30x - 42$

$?(5x - 7)$

6) $32x + 72$

$?(4x + 9)$

I used the distributive property below. Find the missing values that go in the parentheses.

$$1) \quad 4(\quad + \quad) \\ 4x + 8$$

$$2) \quad 5(\quad - \quad) \\ 5m - 45$$

$$3) \quad 7(\quad + \quad) \\ 7g + 21$$

$$4) \quad 3(\quad + \quad) \\ 6k + 9$$

$$5) \quad 2(\quad + \quad) \\ 8p + 14$$

$$6) \quad 9(\quad - \quad) \\ 63g - 54$$

I used the distributive property below. Find the missing values that go in the parentheses.

$$1) \quad 7x + 28 \\ 7(\quad + \quad)$$

$$2) \quad 9x - 81 \\ 9(\quad - \quad)$$

$$3) \quad 12x + 72 \\ 12(\quad + \quad)$$

$$4) \quad 14x + 56 \\ 7(\quad + \quad)$$

$$5) \quad 28x + 8 \\ 4(\quad + \quad)$$

$$6) \quad 27x + 36 \\ 3(\quad + \quad)$$

Write the expression that I had to distribute to get each result.

1) $5x + 30$
(+)

2) $3x - 15$
(-)

3) $8x + 56$
(+)

4) $10x - 6$
(-)

5) $12x + 8$
(+)

6) $9x + 36$
(+)

7) $20x + 5$
(+)

8) $6x - 16$
(-)

9) $24x - 12$
(-)

10) $16x - 8$
(-)

11) $15x + 10$
(+)

12) $9x + 81$
(+)

Find the GCF. Use the GCF to factor each expression.

1) $6x + 30$

GCF of 6 and 30: _____

(\quad + \quad)

2) $30x - 15$

GCF of 30 and 15: _____

(\quad - \quad)

3) $7x + 56$

GCF of 7 and 56: _____

(\quad + \quad)

4) $18x - 12$

GCF of 18 and 12: _____

(\quad - \quad)

5) $12x + 8$

GCF of 12 and 8: _____

(\quad + \quad)

6) $18x + 36$

GCF of 18 and 36: _____

(\quad + \quad)

7) $20x + 55$

GCF of 20 and 55: _____

(\quad + \quad)

8) $18x - 16$

GCF of 18 and 16: _____

(\quad - \quad)

9) $30x - 12$

GCF of 30 and 12: _____

(\quad - \quad)

10) $45x - 72$

GCF of 45 and 72: _____

(\quad - \quad)

11) $28x + 35$

GCF of 28 and 35: _____

(\quad + \quad)

12) $8x + 24$

GCF of 8 and 24: _____

(\quad + \quad)