Name_____

Date_____ Period_____

Solve for X.

1) $x = 5x + 16$

2) $-5x + 2 = 4x + 29$

3) $2x + 5 = -3x - 10$

4) $5x = -5x - 10$

5) $-2x + 1 = 3x + 11$

6) $2x + 3 = -3x + 13$

7) $-5x = -2x - 3$

8) $3x = x - 8$

9) $4x = -5x - 9$

Variables on Both Sides

Solve for X.

1) $x = 5x + 16$

Answer: -4

2) $-5x + 2 = 4x + 29$

Answer: -3

3) $2x + 5 = -3x - 10$

Answer: -3

4) $5x = -5x - 10$

Answer: -1

5) $-2x + 1 = 3x + 11$

Answer: -2

6) $2x + 3 = -3x + 13$

Answer: 2

7) $-5x = -2x - 3$

Answer: 1

8) $3x = x - 8$

Answer: -4

9) $4x = -5x - 9$

Answer: -1

Variables on Both Sides

Date_____ Period_____

Solution Steps

1) $x = 5x + 16$
$x \quad = 5x + 16$
$-5x = -5x$
$-4x = 16$
$/-4 = /-4$
$x \quad = -4$

2) $-5x + 2 = 4x + 29$
$-5x + 2 = 4x + 29$
$-4x \quad = -4x$
$-9x + 2 = 29$
$-2 \quad = -2$
$-9x \quad = 27$
$/-9 \quad = /-9$
$x \quad = -3$

3) $2x + 5 = -3x - 10$
$2x + 5 = -3x - 10$
$+3x \quad = +3x$
$5x + 5 = -10$
$-5 \quad = -5$
$5x \quad = -15$
$/5 \quad = /5$
$x \quad = -3$

4) $5x = -5x - 10$
$5x \quad = -5x - 10$
$+5x = +5x$
$10x = -10$
$/10 = /10$
$x \quad = -1$

5) $-2x + 1 = 3x + 11$
$-2x + 1 = 3x + 11$
$-3x \quad = -3x$
$-5x + 1 = 11$
$-1 \quad = -1$
$-5x \quad = 10$
$/-5 \quad = /-5$
$x \quad = -2$

6) $2x + 3 = -3x + 13$
$2x + 3 = -3x + 13$
$+3x \quad = +3x$
$5x + 3 = 13$
$-3 \quad = -3$
$5x \quad = 10$
$/5 \quad = /5$
$x \quad = 2$

7) $-5x = -2x - 3$
$-5x \quad = -2x - 3$
$+2x \quad = +2x$
$-3x \quad = -3$
$/-3 = /-3$
$x \quad = 1$

8) $3x = x - 8$
$3x \quad = x - 8$
$-x = -x$
$2x = -8$
$/2 = /2$
$x \quad = -4$

9) $4x = -5x - 9$
$4x \quad = -5x - 9$
$+5x = +5x$
$9x \quad = -9$
$/9 \quad = /9$
$x \quad = -1$