Ruben

Homework #____1____

1. $5x + 2 = 3(2x - 1)$

$5 = X$

Reasoning
Subtraction
Division
Multiplication

2. $x + 9 = \frac{5x}{2} - 2$

$2x + 18 \mid 5x$
$-2x$

$\frac{18}{3} = \frac{3x}{3}$

$6 = X$

Reasoning
Multiplication
Distributive
Subtraction
Division

3. $7 - 9x = 5(x+3) + 2x$

$7 - 9x = 5x + 15 + 2x$
$7 - 9x = 7x + 15$

$7 = 16x + 15$
$-15 \qquad -15$
$\frac{-8}{16} = \frac{16x}{16}$ $X = -\frac{1}{2}$

Reasoning
Subtraction
Multiplication
Addition

4. $3x + 1 = 7x - 11$
$-3x \qquad -3x$

$1 \quad 4x - 11$
$+11 \qquad +11$
$\frac{12}{4}$

$-3X$

Reasoning

5. $x + 3(x + 1) = 2x + 7$

$3X \mid 9X$

$3X$

Reasoning
Subtraction
addition

6. $5x - 2(3x+2) = 5(x-2)$
$3x \cdot 5x$

$15x \mid 6$

$X = 3$

Reasoning
Multiplication
division

7. Brad is one year less than twice as old as Naomi. Their combined age is 29.

$B - 1 \cdot 2N = 29$ $\begin{array}{r}15\\+14\\\hline 29\end{array}$

$15 = B \quad N = 14$

8. Jessica bought 12 rose plants and 10 lily plants for her garden. Each rose plant costs $5 more than each lily plant. She spent a total of $148. How much does lily cost? Rose?

lily = 100
Rose = 48

12   10   148
+5