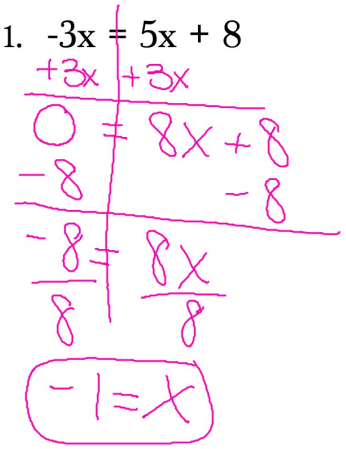
CW 3.2.12

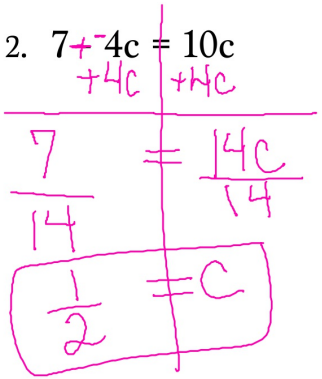
Solving equations with variables on both sides.

Solve the equations, if possible.

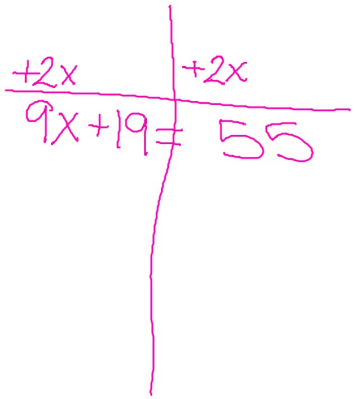
1. $-3x = 5x + 8$



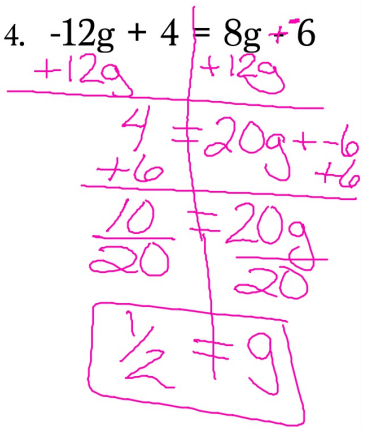
2. $7 + 4c = 10c$



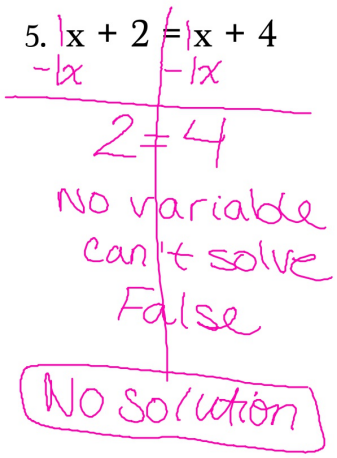
3. $7x + 19 = -2x + 55$



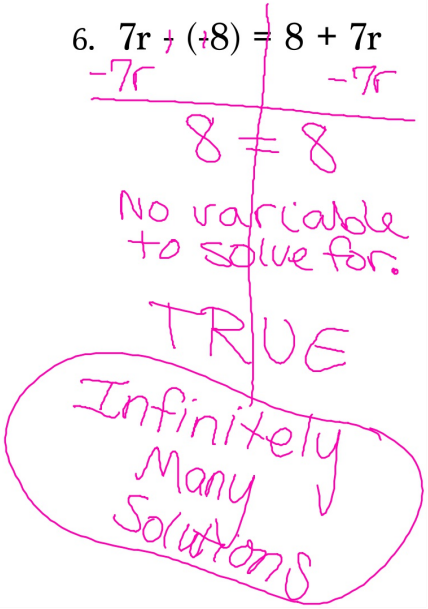
4. $-12g + 4 = 8g + 6$



5. $\frac{1}{2}x + 2 = \frac{1}{2}x + 4$



6. $7r + (+8) = 8 + 7r$



You have \$60 and decide to save \$5 each week. Your sister has \$135 and decides to spend \$10 each week.

a. Write an equation that represents when you and your sister will have the same amount of money.

$60 + 5w = 135 - 10w$

$+10w \quad +10w$

$60 + 15w = 135$

$-60 \quad -60$

$15w = 75$

$15 \quad 15$

$w = 5$

b. Solve the equation you wrote in part a.

c. Explain what your solution in part b means in the context of the situation.

In 5 weeks you & your sister have the same amount of money