

Name: _____
Date: _____
Class: _____

Algebra
Unit 1
HW 1-6

1) Simplify: $2(2x - 4) + 3(6 - 4x)$

2) Simplify: $2x - 6(4 - 3x)$

3) Simplify: $6x - 5 - (3x - \frac{7}{4})$

4) In each situation, determine what the value of q would need to be to make the equation true?

a) $q(7 - 3x) = 21 - 9x$

b) $10y + 20 = (4y + 8)q$

5) Evaluate: $\left| \frac{-5}{-9} - (2)(4.5) + \frac{-12}{5} - 2\frac{4}{7} \right|$

6) Simplify: $(x - 2)(4 - x)$

7) Simplify: $(x + 5)^2$

8) Two friends are saving money to buy a game together. Jimmy uses the equation $7w + 25$ to determine how much money he will have after w weeks. Sam uses the equation $5.5w + 20$ to determine how much money he will have after w weeks. Show how you would find an equation to determine how much they save combined after w weeks. Will they have \$125 after 5 weeks?