Unit 2: Expressions and Equations Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

HW Graded Assignment Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

Directions: Simplify the algebraic expression.

1) 11 – (2k – 9) 2) 5n– 12m + 28 + 6m -4n + 7

Directions: Solve each equation for the given variable. Show ALL work for full credit. (10pts each)

3) 3(5v – 7) = -66 4) 7g + 21 + g = –3

5) 42 = 2 (6 + 3x) 6) -173 = 4a – 20 – 7a

Directions: Define the variable (2 pts). Write an equation (3 pts). Solve the equation (3pts). Interpret the solution (2 pts).

7) Twenty less than 4 times a number is negative seventy-six. Find the number.

 Define the variable \_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Equation: Interpret: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Work: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8) Triple a number decreased by ten is seventeen. Find the number.

 Define the variable \_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Equation: Interpret: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Work: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9) There 285 students went on a field trip. Each of ten buses were filled with students and 25 students traveled in cars. How many students were in each bus?

 Define the variable \_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Equation: Interpret: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Work: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10) Jean is going to buy a new tennis racket. The tennis racket costs $96. Her aunt gives her $40. If she earns $8 an hour babysitting, how many hours will Jean need to babysit to buy the skateboard?

 Define the variable \_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Equation: Interpret: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Work: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_