

Math 085 - Quiz 3

August 29, 2013

Name key

Score _____

Show all your work to receive full credit. Supply explanations when necessary.

NO CALCULATORS ARE ALLOWED ON THIS QUIZ!

1. (1 point) Find the quotient and remainder: $15741 \div 6$

$$\begin{array}{r} 2623 \text{ r } 3 \\ 6 \overline{) 15741} \\ \underline{12} \\ 37 \\ \underline{36} \\ 14 \\ \underline{12} \\ 21 \\ \underline{18} \\ 3 \end{array}$$

$$\boxed{2623 \text{ r } 3}$$

2. (2 points) Solve each equation.

(a) $\frac{5x}{5} = \frac{235}{5}$

$$\boxed{x = \frac{235}{5} = 47}$$

$$\begin{array}{r} 47 \\ 5 \overline{) 235} \\ \underline{20} \\ 35 \\ \underline{35} \\ 0 \end{array}$$

(b) $w + 27 = 95$

$$\begin{array}{r} -27 \quad -27 \\ \hline \end{array}$$

$$\boxed{w = 68}$$

$$\begin{array}{r} 8 \\ 95 \\ \underline{-27} \\ 68 \end{array}$$

3. (2 points) Compute each of the following.

(a) $6[2(8-4) - 7]$

$$= 6(2(4) - 7) = 6(8 - 7) = 6(1) = \boxed{6}$$

(b) $8(3^2) - 5(8-6) - 3(9-6) = 8(9) - 5(2) - 3(3)$

$$= 72 - 10 - 9$$

$$= 62 - 9 = \boxed{53}$$