

M007 – Elementary Algebra

Practice Quiz 1 (1.1-1.3, 1.5-1.8)

Note: This review sheet was created to correspond with the first quiz in M007. As such, this document is only to help you review the concepts presented in your text. Each instructor may have other specific problems you should review in order to be prepared for quizzes and/or exams in your section of the course.

1. Evaluate the expression for the given variable. (Section 1.1)

a. $\frac{15x - 2y}{x + 6}$ when $x=2$ and $y=10$

b. $\frac{m - n}{2}$ when $m=20$ and $n=8$

2. Translate the following word statement. (Section 1.1)

a. *Five less than twice the number is 3 more than a number.*

b. *Two less than Lori's age*

c. *Twice the difference of two numbers.*

3. Use the distributive property to multiply. (Section 1.2)

a. $(3k - m + 2)7$

b. $-3(5x + 2y - 4)$

4. Factor the given expression. (Section 1.2)

a. $15 + 3y$

b. $6x - 10y + 2$

5. Perform the given operations. (Section 1.3, 1.5, 1.6)

a. $\frac{5}{6} + \frac{1}{7} =$

b. $\frac{2}{3} * \frac{-1}{4} \div \frac{5}{6} =$

c. $\frac{2}{3} + \frac{-3}{4} =$

d. $\frac{10x \cdot 12 \cdot 25y}{2 \cdot 30x \cdot 20y}$

e. $-7 - 9$

f. $-8 + 3$

6. Simplify by combining like terms.(Section 1.6)

a. $9x - 3y + (-2) - (-4y) - 3x + 4$

b. $6x + 4y - 2(3y - 2x) + 4x$

7. Simplify the following expression using order of operations.(Section 1.8)

a. $\frac{7^2 - (-1)^5}{3 - 2 \cdot 3^2 + 5}$

b. $2 + 3|2 + (3 - 9)|$

8. Leah has \$350 in a checking account. She writes a check for \$350, makes a deposit of \$75, and when writes a check for \$90. What is the balance in the account? (Section 1.5)

9. The Viking 2 Lander spacecraft has determined that temperatures on Mars range from -125°C to 25°C . Find the temperature range on Mars. (Section 1.6)