

M007 – Elementary Algebra Practice Quiz 3 (4.1-4.4,4.8)

Note: This review sheet was created to correspond with the third 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.

Simplify each of the following. (Section 4.1, 4.8)

1) $\left(\frac{15x^4}{3y^4z^2}\right)^{-2}$

2) $(-5x^4y)(2x^3z^2)^3$

3) $\left(\frac{4x^2y^0}{6x^7y^3}\right)^3$

4) $(x^2yz^5)(x^3y^2x)$

Perform the indicated operation. (Section 4.3)

5) $(4y^5 + 3y^2 - 8y) - (5y + 2y^2 - 6y^5)$

6) $(3x^2 + 2xy^2 - x^2y + y^2) + (4x^2 + 7x^2y - xy^2 + 5y^2)$

7) Classify/identify the indicated parts for the following polynomials. (Section 4.2)

	Monomial, Binomial, Trinomial, or Polynomial	Leading Term	Leading Coefficient	Degree of the Polynomial
$x^4 - 3x + 10x^5$				
$3x + 12$				
$5xy$				

8) The area of a circle of radius r is given by the polynomial πr^2 . Find the area of a circle with a radius of 6ft. (Section 4.2)

Perform the indicated operation & put your answer in Scientific Notation. (Section 4.8)

9) $\frac{3.4 \times 10^5}{4.7 \times 10^{15}}$

10) $(2.7 \times 10^3)(1.9 \times 10^{-12})$

Multiply and simplify each of the following polynomials. (Section 4.4)

11) $-x^3(3x^2 - 2x)$

12) $(5x + 2)(x - 1)$

13) $(3x + 9)^2$

14) $(3x - 4)(2x - 5)$

15) $(a + b)(2a - b)$