

## Semester 1 Exam Practice - Tuesday 12-16-08

Date\_\_\_\_\_ Period\_\_\_\_

**Name the set or sets to which each number belongs.**

1)  $-3$

2)  $\sqrt{94}$

3)  $0$

4)  $\sqrt{20}$

5)  $-7$

6)  $9$

**Evaluate each expression.**

7)  $((-1) - 9)(10) - (-1)$

8)  $((-4) + 2)((-10)(-1))$

9)  $(-2) + 7 + 5 - (-8)$

10)  $3 + (-5) - 7 - 2$

11)  $(6)\left(-\frac{27}{(-2)-1}\right)$

12)  $|(-6)| + |5|$

**Definitions:**

- 13) Define a function. What is function notation? Define a monomial. Define a polynomial. What is the degree of a monomial? What is the degree of a polynomial?

**Simplify. Your answer should contain only positive exponents.**

14) 
$$\frac{(m^3)^4}{-m^{-3} \cdot m^3 n^0}$$

15) 
$$\frac{(a^5 b^3)^5 \cdot -a^0 b^{-2}}{a^{-5}}$$

**Write the slope-intercept form of the equation of the line through the given points.**

16) through:  $(0, -4)$  and  $(2, -4)$

17) through:  $(0, 4)$  and  $(-5, -1)$

# Answers to Semester 1 Exam Practice - Tuesday 12-16-08 (ID: 1)

- |                 |                  |                     |              |
|-----------------|------------------|---------------------|--------------|
| 1) Z, Q, R      | 2) I, R          | 3) W, Z, Q, R       | 4) I, R      |
| 5) Z, Q, R      | 6) N, W, Z, Q, R | 7) -99              | 8) -20       |
| 9) 18           | 10) -11          | 11) 54              | 12) 11       |
| 13) A           | 14) $-m^{12}$    | 15) $-a^{30}b^{13}$ | 16) $y = -4$ |
| 17) $y = x + 4$ |                  |                     |              |