**Task #1:**

Determine which numbers (-9, -7/2, 5, 2/3, , 0, 1, -4, 2, -11) are:

1. Natural #’s (b) Integers (c) Rational #’s (d) Irrational #’s

**Task #2:**

Identify the property of algebra illustrated by the statement.

1. x + 9 = 9 + x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. (x + 3) – (x + 3) = 0 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 2(x + 3) = 2x + 6 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. 1 ● (1 + x) = 1 + x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. x + (y + 10) = (x + y) + 10 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Task #3:**

Simplify.

1. (3x)2  (b) (4x3)2  (c) (-z)3(3z4) (d)

(e) (2x2)-2  (f) (2x5)0  (g) (z+2)-3(z+2)-1 (h)

**Task #4:**

Simplify.

1. (b) (c) (d)

Rationalize the denominator.

1. (f) (g)

**Task #5:**

Perform the operation.

1. (6x + 5) – (8x + 15) (b) (7x3 – 2x2 + 8) + (-3x3 – 4) (c) (5-8x)2

(d) (x2 + 9)(x2 – x – 4) (e)

**Task #6:**

Factor:

1. 2x3 - 6x (b) 9u2 - 4v2  (c) 9u2 + 24uv + 16v2

(d) 27x3 + 8 (e) 3x2 - 5x + 2 (f) x3 - x2 + 2x - 2

**Task #7:**

Simplify.

(a) (b) (c)