**Exponents & Order of Operations**

1. In the expression 54, the base is \_\_\_ and the exponent is \_\_\_.

What is the meaning of this expression?

What is the value of this expression?

2. Evaluate.

(a) 71  (b) 3.40 (c) 23 (d) 32

3. Evaluate.

** ** (c)8[2 + 4(6 – 3) – 5]

** ** (f)6 + 9 ÷ 2 + 1

4. Evaluate each expression if x = 5 and y = 3.

(a) 2x – y (b) x2 – y2 (c) x3 – 2y + 3

(d) 2(x – y) (e) 

**Scientific Notation** a × 10b a is a decimal in the range [1, 10) and b is an integer

5. Convert the following to standard decimal numbers.

(a) 3 × 10-4  (b) 9.3 × 107 (c) 3.25 × 1012

6. Convert the following to scientific notation.

(a) 50,000,000,000 (b) 0.0000000025 (c) 740,000