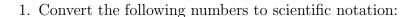
## Scientific Notation Physics II: Modern Physics

College of the Atlantic

## Scientific Notation



- (a) 10000
- (b) 0.0004
- (c) 123000000
- 2. Express the following quantities in scientific notation:
  - (a) 300 million
  - (b) 2.4 billion
- 3. Express the following quantities in non-scientific notation:
  - (a)  $6.13 \times 10^5$
  - (b)  $4.3 \times 10^{-3}$
- 4. Calculate the following, first without, and then with a calculator.
  - (a)  $(4 \times 10^6) \times (5 \times 10^3)$
  - (b)  $(10 \times 10^3) \times (5 \times 10^{-5})$
  - (c)  $\frac{30\times10^9}{200\times10^6}$
- 5. Evaluate the following using a calculator:

$$\frac{4\pi}{\sqrt{3000 \times 2.2 \times 10^{-10}}}\tag{1}$$

$$9.1 \times 10^{-31} (300 \times 10^6)^2 \tag{2}$$