

Scientific Notation

- more convenient way to express large/small #s.
- to express an answer with the correct sds

$$\underline{A} \times 10^{(?)}$$

← integer
-2, 8, 23

$$1 \leq A < 10$$

Basic Skill Quiz:

$$1. \underline{15690} = 1.5690 \times 10^2$$

$$2. \underline{12000} = 1.2 \times 10^4$$

$$3. \underline{0.0345} = 3.45 \times 10^{-2}$$

$$4. 0.00890 = 8.90 \times 10^{-3}$$

$$5. 1.23 \times 10^6 = 1230000$$

$$6. 2.5 \times 10^{-3} = 0.0025$$

$$7. 1.54 \times 10^4 = 15400$$

$$8. 5.67 \times 10^{-1} = 0.567$$

Calculations with Scientific Notation

Multiplying | Dividing:

$$9. \frac{6.6 \times 10^{-8}}{3.3 \times 10^{-4}} = 2.0 \times 10^{-4}$$

$$14. (2.5 \times 10^{-6}) \times (3.0 \times 10^{-7}) = 7.5 \times 10^{-13}$$

Adding | Subtracting

$$13. (1.56 \times 10^{-7}) + (2.43 \times 10^{-8})$$

$$= (15.6 \times 10^{-8}) + (2.43 \times 10^{-8})$$

$$= 18.03 \times 10^{-8}$$

$$= \boxed{1.803 \times 10^{-7}}$$

$$\begin{array}{r} 1245.27 \\ \quad 3.1 \\ + 141 \\ \hline \end{array}$$