

Multiplying a Decimal by a Power of 10

Materials: calculators

1. Solve the following problems:

$$38.5 \times 10^1 =$$

$$38.5 \times 10^2 =$$

$$38.5 \times 10^3 =$$

$$.08 \times 10^1 =$$

$$.08 \times 10^2 =$$

$$.08 \times 10^3 =$$

$$.006 \times 10^1 =$$

$$.006 \times 10^2 =$$

$$.006 \times 10^3 =$$

2. Choose three other two or three-digit decimal numbers. Multiply each number by 10^1 , 10^2 , and 10^3 .
3. Use a calculator to check your work.
4. What pattern do you notice in the placement of the decimal point when a decimal is multiplied by a power of 10? Explain.