NAME _____

Lesson 1.4 Scientific Notation

Scientific notation is most often used as a concise way of writing very large and very small numbers. It is written as a number between 1 and 10 multiplied by a power of 10. Any number can be expressed in scientific notation.

$1,503 = 1.503 \times 10^{3}$ (+3) $\qquad 0.0376 = 3.76 \times 10^{-2}$ (−2) $\qquad 85 = 8.5 \times 10$ (+1)

Translate numbers written in scientific notation into standard form by reading the exponent.

$7.03 \times 10^{5} = 703000$ Move the decimal right 5 places.

$5.4 \times 10^{-4} = 0.00054$ Move the decimal left 4 places.

Write each number in scientific notation.

	a	b	c
1.	0.013 = _____	4105 = _____	27.3 = _____
2.	810.4 = _____	0.684 = _____	0.017 = _____
3.	0.0006 = _____	427.5 = _____	36,054 = _____
4.	50,210 = _____	0.0005 = _____	256.21 = _____
5.	36.25 = _____	0.892 = _____	0.00065 = _____
6.	0.027 = _____	1,416.3 = _____	0.0049 = _____

Write each number in standard form.

7.	$2.6 \times 10^{-3} =$ _____	$8.46 \times 10^{5} =$ _____	$4.65 \times 10^{-1} =$ _____
8.	$9.02 \times 10^{4} =$ _____	$5.15 \times 10^{-2} =$ _____	$8.45 \times 10^{3} =$ _____
9.	$7.25 \times 10^{-4} =$ _____	$1.06 \times 10^{3} =$ _____	$9.06 \times 10^{-5} =$ _____
10.	$9.7 \times 10^{-3} =$ _____	$3.02 \times 10^{4} =$ _____	$1.56 \times 10^{4} =$ _____