

# BIG Quiz Review

1. Convert between decimals, fractions, and percents.

0.15		
	$\frac{3}{4}$	
		45%
0.666666.....		
	$\frac{4}{5}$	
		0.01%

2. Find BOTH square roots for the following numbers:

1	
25	
64	
16	
121	
144	
49	
4	

3. Evaluate.

$\sqrt{9}$

$-\sqrt{25}$

$\sqrt{-16}$

$-\sqrt{-4}$

$-\sqrt{100}$

4. Estimate each square root to the nearest tenth.

$\sqrt{44}$

$\sqrt{39}$

$\sqrt{90}$

$-\sqrt{3}$

$\sqrt{-10}$

5. Evaluate.

$1^3 =$

$2^3 =$

$3^3 =$

$4^3 =$

$5^3 =$

6. Evaluate each completely.

$$\sqrt{80 - 10 + 5 \cdot 2 + 1}$$

$$\sqrt{40 - 2 \cdot 2} + \sqrt{20 + 8 \cdot 2}$$

7. Classify each number as rational or irrational and explain why.

0.1414141414.....      Rational / Irrational      Why?

0.14      Rational / Irrational      Why?

35      Rational / Irrational      Why?

$\sqrt{36}$       Rational / Irrational      Why?

$\sqrt{37}$       Rational / Irrational      Why?

8. Which of the following are written in scientific notation? (Circle the correct answers.)

$45 \times 10^4$

$4.5 \times 10^{10}$

$6.7 + 10^2$

$8.5^{-8}$

$8.1 \times 10^{-43}$

9. Write the following numbers in scientific notation.

$540,000,000$

$1,000,000,000,000$

$0.0000000000000045$

$0.00003$

10. Write the following numbers in standard notation.

$5.5 \times 10^8$

$9.346 \times 10^{10}$

$1.45 \times 10^{-6}$

$6.897 \times 10^{-15}$