Name: _____   Period: _____

Math 7: MCA 5 Practice – Fractions, Decimals and Percents

Directions: Read each question carefully. Show your work or explain your answer for each problem.

1. On his mathematics test, Carlos had 20 correct out of 25 problems. Which of the following is NOT another way of expressing 20 out of 25?

   A. $\dfrac{4}{5}$ B.   0.80   C.   80%   D. $\dfrac{5}{4}$

2. Which value below is equivalent to $5\dfrac{2}{15}$?

   A. $5.1\overline{3}$

   B. $5.\overline{13}$

   C. 5.13

   D. $5.\overline{3}$

3. Which lists the numbers in order from least to greatest?

   A. $0.6, \dfrac{7}{10}, \dfrac{2}{3}, 64\%$

   B. $0.6, 64\%, \dfrac{2}{3}, \dfrac{7}{10}$

   C. $\dfrac{7}{10}, \dfrac{2}{3}, 64\%, 0.6$

   D. $\dfrac{2}{3}, 64\%, \dfrac{7}{10}, 0.6$

4. The price of a pair of shoes rose to $45 from $24.

   What percent increase is this?

5. A radio station awarded prizes to the top three winners of a contest.

- The first place prize was $2000
- The second place prize was 30% less than the first place prize.
- The third place prize was 30% less than the second place prize.

Which table shows the correct three prize amounts in the radio contest?

A. **Radio Station Contest Prizes**

Contest Place	Prize Amount
first	$2000
second	$1970
third	$1940

C. **Radio Station Contest Prizes**

Contest Place	Prize Amount
first	$2000
second	$1400
third	$ 980

B. **Radio Station Contest Prizes**

Contest Place	Prize Amount
first	$2000
second	$1700
third	$1400

D. **Radio Station Contest Prizes**

Contest Place	Prize Amount
first	$2000
second	$1400
third	$ 800

6. Assume you borrow $900 at 7% annual interest for four years. $(I = Prt)$
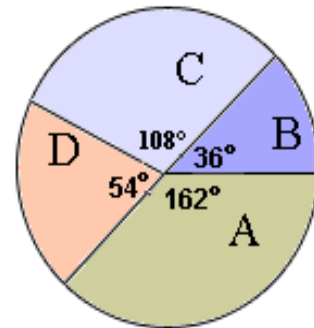
- What is the total interest you will have to pay? Show your work.

- How much total money do you owe at the end of the four years? Show your work.

7. There are 280 students in the seventh grade at Oak Middle School. If 15% of the seventh graders belong to the school choir, how many seventh graders at Oak Middle School belong to the choir?

    A.   19

    B.   28

    C.   42

    D.   56

8. What percent of the circle is covered by A, B and C in the circle graph?

    A.   46%

    B.   306%

    C.   85 %

    D.   54 %

9. Which one of the following numbers is **not** rational? Explain your answer.

    A. $\dfrac{7}{16}$ B. $\dfrac{7}{1}$ C. $\dfrac{7}{0}$ D. 0.7

10. True or False: All rational numbers are integers.

11. True or False: A number is either a rational or an irrational, but not both.