Record your answers in the answer spaces to the right side of the questions. Good luck!

1. There were 224 students, either male or female,   _____
    that participated in the MATHCOUNTS National
    Competition, where the highest possible score is
    46. The average of all the participants' scores
    was 21.54. If the average of all the males' scores
    were 25.77, and the average of all the females'
    scores are 15.9, then how many female students
    participated in the MATHCOUNTS National
    Competition?

2. Andrew has a cylindrical container. The height of   _____
    his container is 8 inches. Given the surface area
    (in square inches) of the cylinder is equivalent in
    value to the volume (in cubic inches) of the
    cylinder, what is the surface area of the cylinder,
    in square inches? Express your answer as a
    decimal to the nearest hundredth.

3. Jaden has 6 yellow cards, 5 red cards, and 4 blue
   cards, all of which are intact. What is the
   probability that he picks the color combination
   yellow-blue-blue-red, in that order, if he
   randomly picks four cards? Express your answer
   as a percent rounded to the nearest tenth.

   _____

4. A point O is randomly selected from the interior
   of unit square $ABCD$, such an example is shown
   below. What is the probability that the triangle
   formed by point O with points A and B is acute?
   Express your answer as a percent rounded to the
   nearest hundredth.

   _____
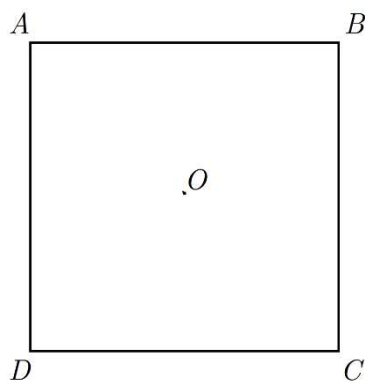
5. I leave for work at 7:00. What is the earliest time   _____
   that the hour and minute hand form a 135° angle
   after I leave for work? Round your answer to the
   nearest minute, ignoring A.M./P.M.

6. Evaluate $a - b + c \cdot d$, for   _____

   - $a = \log_2(1 + i)^{2016}$, for $i = \sqrt{-1}$.
   - $b =$ the area of a rhombus with side length of $\sqrt{68}$ units and a diagonal length of 4 units
   - $c =$ the sum of the positive factors of 16
   - $d =$ the sum of the roots of $x^2 - 64x - 65$.

7. A lattice point is a point with integer coordinates.   _____
   How many lattice points lie inside or on the
   graph of $x^2 + y^2 = 16$?

8. Leo and Waldo each roll a 2016-sided die. What   _____
   is the probability that Leo's number is greater
   than Waldo's number? Express your answer as a
   common fraction.