Name _____ REVIEW of 8th grade concepts
Date _____ Period ___ DO NOW Problems

Directions: These questions review the concepts that you have learned in previous math classes. On **separate** paper, **show all work** for each problem, and **circle** your final answer.

Thursday, September 6

1. A right triangle has one leg that measures 12 and a hypotenuse that measures 20. Find the length of the missing leg.

2. Which gas tank measurement indicates the tank with the greatest amount of fuel?
   a) ½ full b) 1/3 full c) 3/8 full d) 2/5 full

3. Simplify the following expression: $180 \div 6\,(22 - 7)$

4. Express the fraction $\frac{5}{12}$ as a decimal (rounded to the nearest hundredth)

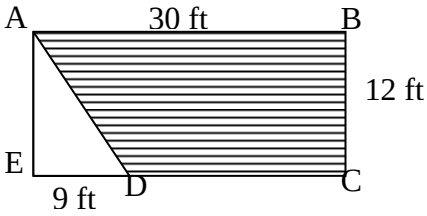
5. Which expression has the least value?
   a) 6^1 b) 0^6 c) 7^0 d) 2^3

6. In the following inequality, $\frac{3}{7} < x \leq 0.75$, which of the following numbers could replace the variable x to make a true statement?
   a) $\frac{9}{12}$ b) $\frac{1}{3}$ c) 0.47 d) $\frac{7}{3}$ e) $\frac{3}{5}$

Friday, September 7

7. Find the area of a rectangle given its perimeter is 80 ft and its length is 24 ft.

8. Given rectangle ABCE whose width measures 12 feet and whose length measures 30 feet with segment DE measuring 9 feet.



   a. Find the length of segment AD

   b. Find the perimeter of quadrilateral ABCD

   c. Find the area of triangle ADE

   d. What type of quadrilateral is figure ABCD?

   e. Find the number of sq. ft. in the area of the striped region

Monday, September 10

9. Define each of the following math vocabulary words and give two examples of each:
   a) prime b) factor c) ratio d) similar figures e) divisibility

10. Solve for x: $\frac{2}{x}+\frac{4}{3}=\frac{10}{3x}$

11. Find the area of a semicircle with a diameter that measures 20 meters. (Use 3.14 for the value of π)

Tuesday, September 11

12. Convert $7\frac{2}{3}$ feet to inches.

13. If eight oranges cost $2.32, find the cost of five oranges.

14. A given triangle has sides of 5, 12, and 13. The shortest side of a similar triangle is 20. Find the length of the longest side of the second triangle.

15. You purchase 3 cans of Pepsi at 85 cents each. Find the change you would receive from $10.

Wednesday, September 12

16. Peter received a score of 75% on his test. There were 60 questions on the test (each question being worth the same amount of credit.) How many questions did Peter answer correctly?

17. The following are Mark's test scores on his English tests: 87, 72, 99, 69, 81, 93, and 84. Find his average (to the nearest whole %)

18. A winter coat costs $220 and sales tax in your area is 6.25%. Find the total cost of buying the winter coat.

19. A car wash hired employees whose ages are given as follows 17, 19, 18, 20, 17, 56, 28, 17. Determine the mean, median, and mode.