7th Grade Math Summer Packet

Dear Parent/Guardian,

In preparation for 7th grade mathematics, a packet of 6th grade review problems must be completed and turned in the first week of school. The packet is posted on the West Essex School's website, http://www.westex.org.

Please follow all directions given below regarding the completion of this packet:

- ✓ No calculators allowed.
- ✓ All work must be shown below or next to each problem.
- ✓ Complete packet to be handed in for a homework grade.
- ✓ Hand in on time for full credit.
- ✓ If there is a topic your child doesn't remember how to do, it should not be left blank, they must try their best.
- ✓ This packet must be completed by your child and no one else.

Please Note: Students will be tested on the topics from this packet within the first two weeks of school. Therefore, they must do the packet themselves.

The following websites can assist your child in the topics covered in the packet.

www.webmath.com
www.mathforum.org/dr.math
www.mathleague.com
www.math.com

Thank You,
7th Grade Math Teachers

Maria Grizzetti
Tricia McCambridge
Sheryl Phillips

NAME _____ PERIOD _____

GRADE 7 SUMMER PACKET 2009

The problems contained in this packet are to be completed **without using a calculator**. The skills contained in these problems are skills that have been covered in the 6th grade curriculum. If you are having difficulty with any of these skills, you may check websites on the internet to help you.

1. Compare each pair of fractions. Use <, >, or =.

$\frac{7}{8} \square \frac{3}{10}$ $\frac{4}{5} \square \frac{6}{10}$ $\frac{4}{9} \square \frac{7}{9}$

2. Order from least to greatest.

$\frac{1}{4}, \frac{1}{3}, \frac{1}{6}$ _____

$\frac{7}{8}, \frac{5}{9}, \frac{2}{3}$ _____

$\frac{3}{4}, \frac{1}{2}, \frac{7}{8}$ _____

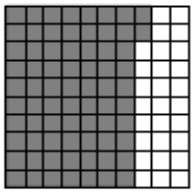
3. Write each mixed number as an improper fraction.

$1\frac{7}{8}$ _____ $3\frac{3}{4}$ _____ $3\frac{11}{12}$ _____

4. Write each improper fraction as a mixed number in simplest form.

$\frac{15}{2}$ _____ $\frac{22}{5}$ _____ $\frac{17}{9}$ _____

5. Write the decimal represented by the model as a fraction.



_____

6. Write each decimal as a fraction. Reduce.

0.6 _____ 1.25 _____ 0.645 _____

7. Write each fraction as a decimal.

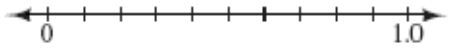
$\frac{9}{100}$ _____ $\frac{3}{50}$ _____

8. Insert <, >, or = in each box to make a true statement.

0.62 ☐ 0.618 2.01 ☐ 2.011 15.8 ☐ 15.800

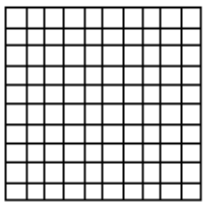
9. Order the set of decimals on the number line.

0.2, 0.6, 0.5



10. Shade the grid to represent the given percent.

53%



11. Write each fraction as a percent.

$\frac{4}{5}$ _____ $\frac{6}{25}$ _____ $\frac{2}{5}$ _____

12. Write the percent as a decimal and as a fraction. Reduce the fraction.

46% _____ _____

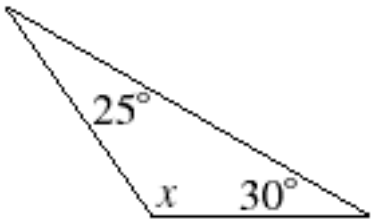
13. Write the decimal as a percent and as a fraction. Reduce the fraction.

0.02 _____ _____

14. Write the fraction as a decimal and as a percent.

$\frac{3}{5}$ _____ _____

15. Find the measure of each angle labeled *x*. Show your work.



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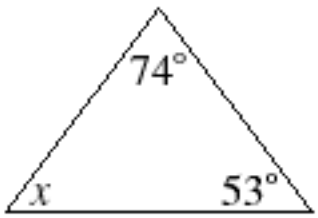

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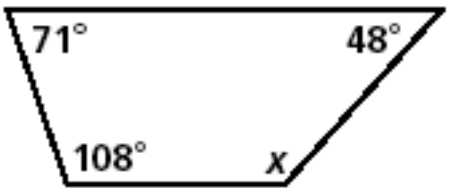

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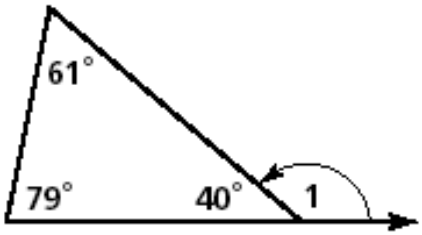
16. Find the measure of angle 1 in the figure. Show your work.



17. Find each sum or difference. Show your work.

$\frac{1}{4}+\frac{2}{4}$ Final answer _____

$\frac{1}{8}+\frac{5}{8}$ Final answer _____

$\frac{2}{5}-\frac{1}{10}$ Final answer _____

$\frac{2}{3}-\frac{1}{6}$ Final answer _____

$4\frac{3}{10}+5\frac{2}{5}$ Final answer _____

$7\frac{1}{3}+5\frac{11}{12}$ Final answer _____

18. Find each product. Show your work.

$2\frac{5}{6} \times 1\frac{3}{4}$ Final answer _____

$\frac{1}{4} \times 5\frac{2}{5}$ Final answer _____

$3\frac{1}{3} \times 3\frac{3}{10}$ Final answer _____

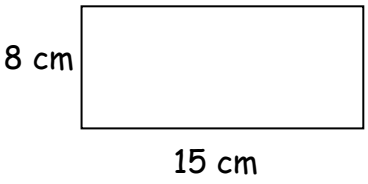
19. Find each quotient. Show your work.

$1\frac{1}{2} \div \frac{2}{3}$ Final answer _____

$1\frac{7}{10} \div \frac{1}{2}$ Final answer _____

$2 \div 3\frac{4}{5}$ Final answer _____

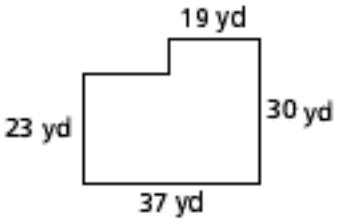
20. Find the perimeter and area of each rectangle. Show your work.



Perimeter = _____ Area = _____

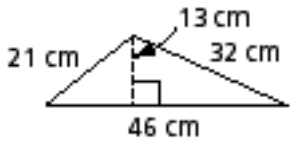
length = 5 in, width = 13 in Perimeter = _____ Area = _____

21. Find the perimeter and area. Show your work.

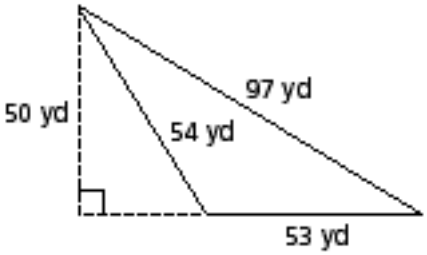


Perimeter = _____ Area = _____

22. Find the area of each triangle. Show your work.

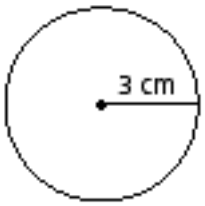


Area = _____



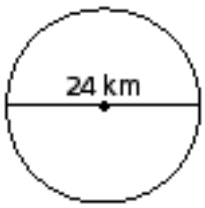
Area = _____

23. Find the area of the circle. Round to the nearest tenth. Show your work.



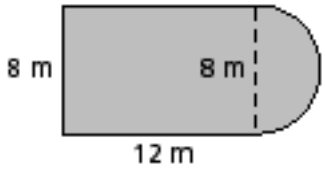
Area = _____

24. Find the area of the circle. Round to the nearest unit. Use 22/7 for π. Show your work.



Area = _____

25. Find the area of the region to the nearest tenth. Show your work.



Area = _____

26. Find each sum or difference. Show your work.

0.6 + 5.8

Final answer _____

3.1 – 2.076

Final answer _____

3 + 4.02 + 8.6

Final answer _____

27. Find each product. Show your work.

43.59 x 0.1

Final answer _____

$$\begin{array}{r} 0.72 \\ \times\ 0.43 \\ \hline \end{array}$$

Final answer _____

28. Find the quotient. Show your work.

3.9 ÷ 0.05

Final answer _____

29. Find each amount. Show your work.

40% of 70

Final answer _____

62.5% of 24

Final answer _____

30. Solve. Show your work.

76 is 80% of what number?

Final answer _____

What is 85% of 120?

Final answer _____

What percent of 80 is 50?

Final answer _____

31. A number cube is rolled once. Find each probability.

$P(3)$ _____

$P(1, 3, \text{or } 5)$ _____

32. A stack of 9 cards is placed face down. Each card has one letter of the word EXCELLENT. Find the probability.

$P(E)$ _____

33. Ms. Makita made a line plot to show the scores her students got on a test. Below is Ms. Makita's line plot.

What does each data item or x represent?

How many more students scored 75 than scored 95?

How many students scored over 85?

What scores did the same number of students get?