Math 6 – Semester 2 Exam Study Guide

The following questions are similar, if not exactly like, the questions which will be found on the exam.

1) Find if 1300 is divisible by 2, 3, 5, 6, 9, and 10?

2) Is 27 a composite number? Why or why not?

3) What the prime factorization of 84

4) What is the GCF of 34 & 96?

5) What is the LCM of 16 and 40?

6) Write two fractions equivalent to $\dfrac{5}{6}$.

7) Put these numbers in order from least to greatest: $\dfrac{7}{5}, 1\dfrac{3}{6}, \dfrac{15}{8}, \dfrac{32}{16}$

8) Write a mixed number equal to $\dfrac{34}{7}$.

9) Which improper fraction is equal to $5\dfrac{4}{9}$?

10) Which mixed number is equal to 4.85? (Put the fraction in simplest form.)

11) Which number is the decimal equivalent of $7\dfrac{3}{8}$?

12) Find the sum $\dfrac{9}{10} + \dfrac{3}{4}$. Show your work.

13) Find the difference $\dfrac{3}{5} - \dfrac{9}{20}$. Show your work.

14) You planted $16\dfrac{2}{5}$ acres of corn yesterday and $18\dfrac{1}{10}$ acres today. How many more acres did you plant today?

15) Find the sum $5\dfrac{5}{16} + 3\dfrac{3}{16}$

16) Evaluate $6\dfrac{1}{3} - x$ for $x = 3\dfrac{1}{4}$

17) What is the perimeter of a triangle with sides measuring $5\dfrac{3}{10}$ cm, $6\dfrac{1}{5}$ cm, and $3\dfrac{2}{5}$ cm?

18) Maria earns $18 an hour. If she works $\dfrac{1}{4}$ an hour, how much money does she earn?

19) Find the product $\frac{9}{10} \times \frac{3}{4}$. Show your work.

20) What is the value of the expression $\frac{3}{7}x$ when $x = \frac{10}{12}$

21) A pine tree is $9\frac{1}{4}$ feet tall. A maple tree is $3\frac{1}{4}$ times as tall as the pine tree. How tall is the maple tree?

22) What is the reciprocal of $2\frac{4}{9}$?

23) You have 8 cups of pasta in a bowl. How many $\frac{3}{4}$ cup servings can you make?

24) Find the quotient $\frac{5}{12} \div \frac{3}{24}$

25) Find the quotient $2\frac{1}{3} \div 1\frac{4}{5}$

26) A man has 18 Snickers bars and 34 Milky Way bars. What is the ratio of Snickers bars to Milky Way bars?

27) What is the unit price for steak that cost $32.79 for 6.25 pounds?

28) You buy a shirt for $14 and a pair of pants for $38. There is a 6% sales tax on the sale. How much did you pay in all?

29) The school is selling turkeys for a fundraiser. If 35% of all sales goes to the school, how much money did the school make if it generated $19,000 in sales?

30) A jacket costing $80 is on sale with a discount of 40%. What is the sale price?

31) What number would you use to represent an decrease of 98 feet?

32) What is the mean of 8, -5, 4, -4, and 12

33) What is the opposite of -10?

34) Joe had $345 in his savings account. He deposited $45, withdrew $92, and deposited another $105. Represent each transaction as an integer, and find the current balance in his account.

35) A recipe calls for $1\frac{3}{4}$ cups of butter. Sharon was making $\frac{1}{2}$ of the recipe. She divided $1\frac{3}{4}$ by $\frac{1}{2}$ to find out how much butter she needed. Was her method correct? Explain.

36) You are making clam chowder, but lost all of your measuring cups except the $\frac{1}{3}$ cup and the $\frac{1}{4}$ cup. Explain how you can

measure out $2\frac{1}{2}$ cups of milk using only the measuring cups you have. Use math to verify your answer.

37) A car gets uses 16 gallons on a 332 mile trip? How many miles does can it travel for every gallon of gas used? Is this answer a unit rate? Explain why or why not.

Name: _____   Per: _____

TSA 6th Grade Math – 2009-2010 Semester 2 Exam -
ANSWER SHEET

Multiple Choice – Place the LETTER of the correct answer on the line

1) _____   2) _____   3) _____   4) _____   5) _____   6) _____

7) _____   8) _____   9) _____   10) _____   11) _____   12) _____

13) _____   14) _____   15) _____   16) _____   17) _____   18) _____

19) _____   20) _____   21) _____   22) _____   23) _____   24) _____

25) _____   26) _____   27) _____   28) _____   29) _____   30) _____

31) _____   32) _____   33) _____

Extended Repsonse – Show your work AND your final answer.
Number each problem, and circle your final answer.

Use the space below and on the back of this paper.