Pretest - Part 1

Name__________________________________________

Date________________________

Do your best to answer these questions. It is OK if there are some questions you cannot answer.

Directions: Show all your work and label your answers with units. If necessary, round your answers to a reasonable number of decimal places.

Part 1 – No Calculators. When you complete this part, turn in your paper and get Part 2.

1. In mid-June a heat wave causes the daily high temperature in Springfield to increase. On June 10 the high temperature was 71 degrees. On June 14 the high temperature was 83 degrees. What was average temperature increase in degrees per day?

2. John has 5 pet hamsters. The hamsters eat 6 tablespoons of food in 3 days. How much food is needed to feed them for 12 days?

3. You are running on the track at a rate of 32 laps per hour. There are 4 laps per kilometer. How many kilometers do you run per hour?

4. In a cherry orchard, one person can pick 20 bushels of cherries in a day. There are 5 people on a cherry picking crew. If three crews are working today, how many bushels of cherries will be picked?

5. A grain storage silo currently has 300 bushels of corn in it. Corn is being added from a truck at a rate of 12 bushels per minute. How much will be in the storage silo after 10 minutes?
Pretest - Part 2

Do your best to answer these questions. It is OK if there are some questions you cannot answer.

Directions: Show all your work and label your answers with units. If necessary, round your answers to a reasonable number of decimal places.

Part 2 – Calculators allowed.

6. In a Pet Shop flier advertisement 3.8 pounds of bird seed costs $5.51. What is the cost per pound?

7. Julie is shopping for a prepaid phone. The first phone has 150 minutes for $9.52. The second phone has 120 minutes for $7.70. Which phone has the cheaper minutes?

8. A chemical solution contains 15.4 grams of sulfur per liter. A container has 15 liters of the chemical solution. Find the number of grams of sulfur in the container.

9. Jackie and Sallie buy 120 craft beads for 6 dollars.
   a) Jackie takes $120 \div 6$ and gets 20. Explain what the 20 means.

   b) Sallie takes $6 \div 120$ and gets .05. Explain what the .05 means.

10. On the scale on the Utah map, 1 inch equals 40 miles. St. George, UT and Salt Lake City, UT are 7½ inches apart on the map. How far apart are these cities?

11. We are preparing a tray of strawberry shortcake. We need 5 strawberries per plate. Each tray holds 18 plates. How many strawberries do we need?
12. A turtle swims at a rate of 1000 feet per hour. Convert this speed to feet per second. (1 foot = 12 inches)

13. We can paint 12 chairs using 16 cans of spray paint. How many cans of paint do we need for 30 chairs?

14. Chocolate covered raisins cost $4.35 per pound. You have $3. How much (in pounds) can you buy? Round your answer to two decimal places.

15. A college student eats 2 packages of ramen noodles every day. He can buy 7 packages for $1. How much does he spend on in September (30 days)?

16. The graph at the right shows the distance traveled by a car during a five hour trip. The speed the car travels in the first three hours is faster than the speed during the last two hours of the trip. What is the average speed of the car for the five hour trip?

17. Robin mowed three yards. At the first yard Robin was paid $6 per hour and it took 2 hours to mow the yard. The second yard also took 2 hours to mow, but the pay was $5 per hour. The third yard took 4 hours to mow and the pay was $8 per hour. What is Robin’s average pay per hour?