Willard Middle School – Mathematics

FORMATIVE TEST – Power Standard 7:7

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_\_

1. Robert works at a local restaurant where he receives an employee discount. If the menu price for a pizza is $16.99 and Robert only has to pay $14.44, how much of a discount does he receive?
2. 2.55%
3. 15%
4. 35%
5. 85%
6. Find the unit rate of 115 miles in 2 hours
7. Choose the better unit price: A 32-ounce bottle of juice for $2.50 or a 48-ounce bottle of juice for $3.84.
8. Does the following chart show a constant rate of change? Explain your reasoning.

|  |  |
| --- | --- |
| Hours worked | Money made |
| 1 | $16 |
| 2 | $32 |
| 3 | $48 |
| 4 | $64 |

1. 13 is what percent of 50? Use the percent proportion to find you answer.
2. Are $\frac{2}{7} $and $\frac{6}{20} $equivalent? Explain your reasoning.
3. John is able to read 40 pages in 50 minutes. How many pages should he be able to read in 80 minutes? Use a proportion to find your answer.
4. The carpenter wants to make a model of his dresser for Katie’s dollhouse furniture. The scale is 3 in: 1 ft. The height of the dresser in the dollhouse is 10 in. What is the height of the carpenter's dresser?
5. What will happen to the total perimeter when a rectangle is dilated by a factor of $\frac{1}{2}$?
6. It will not change.
7. It will be $\frac{1}{2}$ more than the original perimeter.
8. It will be half of the original perimeter.
9. It will be twice the original perimeter.