Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

Test Review - Multiple Representations and Compare and Order rational numbers

1. You have to have electrical work done on your home. You call an electrician who tells you that she charges $40 per hour and a service call fee of $20. What is the equation if *y*, represents the total charge for the visit, and *x* represents the number of hours? Is this a proportional or non-proportional relationship? Explain.
2. Given the sequence 7, 11, 15, 19, 23,…, make a table and write the equation. Find the nth term for when n = 11.
3. Useinformation in the graph below to create a table, and then use the table to find your equation.

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 Also answer the following questions about the graph.

1. Does this graph represent a proportional or

 non-proportional relationship? Justify your

 answer.

1. If you had 6 hours of work, how much did you make?

1. If you made $130, how many hours did you work?

1. A sequence of numbers was generated using the expression 7n – 6, where *n* represents a number’s position in the sequence. Generate the first 5 terms of the sequence.
2. Heather has the following numbers two numbers $\frac{2}{3}$ and $\frac{4}{5}$. Heather wants to know which numbers fit in between these two numbers. Out of these four numbers which numbers fit in between Heather’s numbers: $\frac{3}{4}$, $\frac{7}{8}, \frac{7}{10},\frac{7}{12}$.
3. The value of *y* is 6 times the value of *x*. What is the equation? Is this a proportional or non-proportional relationship? Explain.
4. Given the following set of numbers 312%, 3 $\frac{1}{4}$, 3.14%, 3 $\frac{1}{8}$ , and 3.2 what is the order of the numbers from least to greatest?
5.  The cost of renting a dry cleaning machine is $10 per day and a $5 rental insurance fee. Write an equation to represent *y*, the total amount to rent the cleaning machine for x number of days?

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Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 40

|  |  |  |
| --- | --- | --- |
| ***x*** | **Process:** | ***y*** |
| 1 |  |  |
| 3 |  |  |
| 7 |  |  |
| 9 |  |  |

 30

 20

 10

 0 1 2 3 4 5 6 7 8 9 10