Activity: Selected Assignments from the April Optional Work Packet

Week: May 4 – May 8

Grade 6

Class Math

Teachers: Ms. Carter, Mr. Dedrick, Ms. Hartley Ms. K. Ross, Mr. Reed

Key Content/Modeling:

Go online to www.Pearsonrealize.com Or log into Pearson using your o365 account. The following videos have been assigned:

I. Video: 3-5 Virtual Nerd: How do you Evaluate an Algebraic Expressions with One Variable.
II. Video: 3-5 Virtual Nerd: How do you Evaluate an Algebraic Expressions with Two Variables
III. Video: Math Antics
   https://www.youtube.com/watch?v=NybhckSEQBI

You Try:

• 3-5: MathXL for School: Practice & Problem Solving
• 3-5: Additional Practice Workbook
• Hundred Chart

Show me what you know (Proof of learning):

Complete your work and e-mail pictures (or solutions) to your teachers.

Self-Assessment:

Did I complete all of the tasks?
Did I try my best?

Priority Standard(s):

6.EE.A.2c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents in the conventional order when there are no parentheses to specify a particular order.

What am I learning?

I can evaluate an algebraic expression with whole numbers, decimals and fraction.

How do I know I learned?

Learning Evidence in 1-3 Descriptors

I fully completed all tasks and checked my answers to make sure they made sense to answer the questions.

Extra Learning Opportunities: Find some math in your community! Did you use ratio reasoning for cooking? Did you have to add or subtract decimals when you were shopping? Did you find any ratios in your video games? Tell us about what you've found on e-mail; we'd love to hear all about it!
Good Morning Students

Monday May 4, 2020

Today Focus:

- In the April Family Resource Packet

Learning Target:

- Make Sense of Problems and Persevere in Solving Them
- Construct Viable Arguments
- Model with Mathematics

Special Note:

- Read each example and do your best in completing all work. If you have any questions, are stuck on a problem, or want me to check your work, please email me and I will be sure to get back with you.
- Take a picture of your work and send it via email for all feedback.
- If you are having trouble accessing the resource packet, please let me know so I can work on ways of getting it to you.
- Paper copies of the resource packet are available to pick up at First Creek on Tuesdays and Thursdays at lunch time.

Tips & Hints:

- Read the entire problem before beginning to work to an answer.
- What do you know about each problem?
- What’s unknown about each problem (what are you trying to discover)?
- Can you draw a diagram (or picture) to help understand the problem?
The following pages can be accessed through your Pearson account. Remember to login using your o365 account. Complete these problems to refresh your skills - evaluating algebraic expressions, and operations with rational numbers.

**3-5 Additional Practice**

In 1-8, find the value of each expression when \( a = \frac{2}{3}, b = 9, c = 5, \) and \( d = 10. \)

1. \( 6a + 4 \)
2. \( 5a - \frac{2}{3} \)
3. \( 5d + c + 2 \)
4. \( b^2 - 9a \)
5. \( 12a + c - b \)
6. \( \frac{1}{2}d + c^2 - b \)
7. \( d^2 - 2c - b + 3a \)
8. \( 3c + b^2 + 27a - d \)

In 9-11, evaluate each expression for \( x = 3.1, x = 6.2, \) and \( x = 8.3. \)

9. \( 5x \)
10. \( 8.2 + x - 2 \)
11. \( 2x + 1.5x \)

In 12 and 13, evaluate each expression for the set of values given in the table.

<table>
<thead>
<tr>
<th>( c )</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>( 28 - c^2 + 6 )</td>
<td>_</td>
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<table>
<thead>
<tr>
<th>( t )</th>
<th>0.01</th>
<th>1</th>
<th>2.5</th>
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<tbody>
<tr>
<td>( \frac{9.5}{t} + 3.2t )</td>
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In 14 and 15, use the table at the right.

**14. Model with Math** Tamera has a pet-sitting business. The table shows how much she charges. Last week, she sat for one dog and for two cats.  

a. Suppose that Tamera spent \( h \) hours sitting the dog and 2 days sitting the cats. Write an expression that shows how much she earned.

b. Evaluate the expression you wrote to find how much Tamera earned if she sat 2 hours for the dog.

15. For any of the pet-sitting services listed in the table, how many hours can you purchase before it would be cheaper to pay for one day?
16. Higher Order Thinking The deli sells ham for $3.95 per pound, turkey for $4.30 per pound, and cheese for $3.10 per pound. Write an expression that shows how much it will cost to buy $h$ pounds of ham, $t$ pounds of turkey, and $c$ pounds of cheese. Then find the cost for 1 pound of ham, 1.5 pounds of turkey, and 2.3 pounds of cheese.

17. Model with Math Juan rented a paddleboard for $5.75 per hour plus a $17.50 fee. Write an expression that shows how much it will cost Juan to rent the paddleboard for $x$ hours. Then evaluate the expression for 3 hours.

18. Be Precise The table shows how much a frozen yogurt shop charges for its yogurt. Write an expression to show how much it costs to buy a small yogurt with no toppings and a large yogurt with $x$ toppings. Then find the total cost for a small yogurt with no toppings and a large yogurt with 3 toppings.

<table>
<thead>
<tr>
<th>Size of Cup</th>
<th>Cost of Cup</th>
<th>Cost per Topping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>$2.85</td>
<td>$0.25</td>
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<tr>
<td>Medium</td>
<td>$3.75</td>
<td>$0.30</td>
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<td>Large</td>
<td>$4.65</td>
<td>$0.35</td>
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19. A school district can send a representative to the state spelling bee for every 50 students in the school district that year. There are 5 schools with $a$, $b$, $c$, $d$, and $e$ students, respectively.

a. Write an algebraic expression to show how many representatives, $r$, the school district will have in any year.

b. The table shows the number of students at each school this year. Use your expression to find the number of students the school district can send to the state spelling bee this year. Does your answer make sense? Explain.

<table>
<thead>
<tr>
<th>District Schools This Year</th>
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<tbody>
<tr>
<td>1,587 students</td>
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<tr>
<td>985 students</td>
</tr>
<tr>
<td>2,052 students</td>
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<tr>
<td>824 students</td>
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<tr>
<td>752 students</td>
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20. Choose the correct values from the box below to complete the table. Evaluate the expression for each value of the variable in the table.

$$3r - (r \div 0.47)$$

<table>
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<tr>
<th>$r$</th>
<th>0.59</th>
<th>1.8</th>
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<td>0.71</td>
<td>0.97</td>
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<td>3.73</td>
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Color in the boxes of the hundreds chart in the following manner.

- If a number is divisible by 2, color it yellow.
- If a number is divisible by 3, color it green.
- If a number is divisible by 4, color it red.
- If a number is divisible by 5, color it blue.
- If a number is divisible by 7, color it orange.
- If a number is divisible by 11, color it purple.
Now answer these questions:

1) Do any of the colors make patterns? If yes, what patterns do you see?

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________

2) What color(s) are the numbers that are divisible by 6? What does that tell you about numbers that are divisible by 6?

_________________________________________________

_________________________________________________

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3) What color(s) are the numbers that are divisible by 8? What does that tell you about numbers that are divisible by 8?

_________________________________________________

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4) What color(s) are the numbers that are divisible by 9? What does that tell you about numbers that are divisible by 9?

_________________________________________________

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5) What color(s) are the numbers that are divisible by 10? What does that tell you about numbers that are divisible by 10?

_________________________________________________

_________________________________________________

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Prime numbers are numbers that are only divisible by two unique factors. Composite numbers are divisible by multiple factors.

- Draw a dark outline around each prime number.

6) Is there any pattern to the prime numbers? If yes, what patterns do you see?

_________________________________________________

_________________________________________________

_________________________________________________

_________________________________________________
7) Are there more prime numbers or composite numbers? Why?
_________________________________________________
_________________________________________________
_________________________________________________
______________________________________________

8) **Make a prediction**: What is the smallest prime number that is greater than 100? ____________________________
9) **Strategize**: How can you check to see if your prediction is correct?
_________________________________________________
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10) **Self-Assessment**: Use your strategy (from question 9) to determine whether your prediction (from question 8), is correct. Explain your reasoning.
_________________________________________________
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**Bonus** Use your answers for problems 1-5 to create rules to determine whether a number is divisible by any number from 2 through 10. A rule for 2 has been provided as an example.

2: All even numbers are divisible by 2. ____________________________
3: _______________________________________________________
4: _______________________________________________________
5: _______________________________________________________
6: _______________________________________________________
7: _______________________________________________________
8: _______________________________________________________
9: _______________________________________________________
10: ______________________________________________________
## Extra Hundred Chart

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