

# Week of April 20-24, 2020

## Mrs. Epperson

How are you doing? I am REALLY missing you ALL! If you are able, please connect with us through our google classroom. We have weekly calls on Thursdays if you are able to join us. They are NOT required, but it's nice to catch up and see your faces. The times we meet on Thursdays are 6th grade: 12:45-1:15, 7th grade: 1:15-1:45, and 8th grade: 1:45-2:15, you can find the link to connect with us in your student email (same email and password you use to log into chromebooks; remember, the ending of your email address is @oakland5.org)

You may use your math folder to help you. You have to complete 1 worksheet, but may complete all 3. I am available at [nichole.epperson@oakland5.org](mailto:nichole.epperson@oakland5.org) or 708-517-0534 for any questions. You may call or text.

All worksheets have the appropriate grade level/subject at the top.

<b>Class</b>	<b>Choice 1</b>	<b>Choice 2</b>	<b>Choice 3</b>
6th grade math	2-3	2-4	2-5
7th grade math	2-2	2-3	2-6
8th grade Algebra	1-10	2-2	2-3



# 1-10 Additional Practice

Week of 4/20-4/24

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**Leveled Practice** In 1 and 2, complete the expressions to find the answer.

1. Simplify the expression  $(9.6 \times 10^{-8}) \div (2 \times 10^{-15})$ . Express your answer in scientific notation.

$$\left( \quad \div \quad \right) \times (10 \quad \div 10 \quad)$$

$$\times 10$$

2. Simplify the expression  $(6.8 \times 10^6) + (3.4 \times 10^6)$ . Express your answer in scientific notation.

$$\left( \quad + \quad \right) \times 10$$

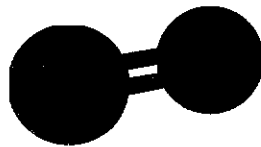
$$\times 10$$

$$\times 10$$

3. What is the value of  $n$  in the equation  $2.6 \times 10^{-2} = (5.2 \times 10^7) \div (2 \times 10^n)$ ?

4. Simplify  $(14.1 \times 10^5) - (2.9 \times 10^5)$ . Write your answer in scientific notation.

5. What is the mass of 75,000 oxygen molecules? Express your answer in scientific notation.



Mass of one molecule of oxygen =  $5.3 \times 10^{-23}$  gram

6. **Critique Reasoning** Your friend says that the quotient of  $9.2 \times 10^8$  and  $4 \times 10^{-3}$  is  $2.4 \times 10^5$ . Is this answer correct? Explain.

7. Find  $(3.8 \times 10^7) \times 162$ . Write your answer in scientific notation.

8. Find  $\frac{10.5 \times 10^{-5}}{2.5 \times 10^{-2}}$ . Write your answer in scientific notation.

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9. Find  $\frac{6.5 \times 10^{11}}{1.3 \times 10^8}$ . Write your answer in scientific notation.

10. Find  $(7.6 \times 10^3) \times (5.9 \times 10^{12})$ . Write your answer in scientific notation.

11. The average U.S. resident uses 100 gallons of water per day. The population of the United States is about  $3.23 \times 10^8$ . About how many gallons of water do U.S. residents use each day? Express your answer in scientific notation.

12. Higher Order Thinking

a. What is the value of  $n$  in the equation  $1.8 \times 10^n = (6 \times 10^8)(3 \times 10^6)$

b. Explain why the exponent on the left side of the equation is not equal to the sum of the exponents on the right side.



## Assessment Practice

13. Find  $(4.54 \times 10^8) - (3.98 \times 10^8)$ . When you regroup the decimals, what do you notice about their difference? How does this affect the exponent of the difference?

14. Which expression has the greatest value?

Ⓐ  $(3.23 \times 10^4) + (5.6 \times 10^{-3})$

Ⓑ  $(3.23 \times 10^4) - (5.6 \times 10^{-3})$

Ⓒ  $(3.23 \times 10^4) \times (5.6 \times 10^{-3})$

Ⓓ  $(3.23 \times 10^4) \div (5.6 \times 10^{-3})$



PRACTICE



TUTORIAL

Name: \_\_\_\_\_

## 2-2 Additional Practice

Week of 4/20-4/24

Leveled Practice In 1 and 2, solve each equation.

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1.  $6.4n - 10 = 4.4n + 6$

$$n - 10 =$$

$$n =$$

$$n =$$

2.  $\frac{1}{3}k + 80 = \frac{1}{2}k + 120$

$$\frac{\quad}{6}k + 80 = \frac{\quad}{6}k + 120$$

$$= \frac{\quad}{6}k + 120$$

$$= \frac{\quad}{6}k$$

$$= k$$

3. You and a friend are doing math homework together. You have to solve the equation  $5x + 4x - 68 = 34 - 8x$ . Your friend arrives at the answer  $x = -2$ . Is she correct? Explain.

In 4 and 5, solve the equation for  $x$ .

4.  $\frac{5}{8}x + 4 = \frac{3}{8}x + 12$

5.  $150 - x - 2x = 120 + 2x$

6. A rental car agency charges \$240 per week plus \$0.25 per mile to rent a car. The charge for a minivan is \$180 per week plus \$0.40 per mile. After how many miles is the total charge for each vehicle the same?

7. The Smith family and the Jackson family are having their basements remodeled. The Smith's contractor charges \$16.50 per hour plus \$289 in supplies. The Jackson's contractor charges \$18.75 per hour and \$274.60 in supplies. At how many hours of work will the total cost be the same for both families?

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8. Jim currently has \$1,250 in his bank account and Sally has \$1,400 in her bank account. Jim deposits \$27.50 per week and Sally deposits \$20 per week into her account. After how many weeks will they have the same amount of money?
9. **Higher Order Thinking** The price of Stock A at 9 A.M. was \$15.75. Since then, the price has been increasing at the rate of \$0.05 per hour. At noon, the price of Stock B was \$16.53. It begins to decrease at the rate of \$0.13 per hour. If the stocks continue to increase and decrease at the same rates, in how many hours will the prices of the stocks be the same?



## Assessment Practice

10. Solve the equation  $\frac{7}{3}x + \frac{1}{3}x = 1 + \frac{5}{3}x$ . Show your work.

11. Schools A and B are competing in an academic contest. At the beginning of the final round, School A has 174 points and School B has 102 points. In the final round, correct answers earn 10 points and incorrect answers lose 6 points. School A gives the same number of correct and incorrect answers during the final round. School B gives no incorrect answers and the same number of correct answers as School A. The contest ends with the two schools tied.

## PART A

Which equation models the scoring in the final round and the outcome of the contest?

- (A)  $174 + 10x = 102 + 10x - 6x$
- (B)  $174 + 10x - 6x = 102 + 4x$
- (C)  $174 - 6x = 102 + 10x$
- (D)  $174 + 10x - 6x = 102 + 10x$

## PART B

How many correct answers does each school give during the final round?



PRACTICE



TUTORIAL

## 2-3 Additional Practice

Week of 4/20-4/24

Leveled Practice In 1-3, find the value of  $x$ .

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1. Donavon and three friends go to a fair. They each spend  $\frac{1}{2}$  of their money on rides. Then they each spend \$3 on food. At the end of the day, Donavon and his friends have a total of \$8 remaining. How much money did each person bring to the fair?

$$4(x - \quad) =$$

$$x - \quad =$$

$$x =$$

$$x =$$

Donavon and his friends each brought a total of \$ \_\_\_\_\_.

2. Use the Distributive Property to solve the equation  $25 - (3x + 5) = 2(x + 8) + x$ .

$$25 - \quad x - \quad = 2x + \quad + x$$

$$20 - \quad x = \quad x +$$

$$20 - \quad x =$$

$$x =$$

$$x =$$

3. Use the Distributive Property to solve the equation  $2(x - 3) + 3 = 6x - 5$ .

$$x - \quad + 3 = 6x -$$

$$x - \quad = 6x -$$

$$x - \quad =$$

$$x =$$

$$x =$$

4. Solve the equation  $\frac{1}{5}(x - 2) = \frac{1}{10}(x + 6)$ .

5. Solve the equation  $0.35(x + 4) = 0.25(x - 6)$ .

6. If you take  $-\frac{3}{10}$  of a number and add 1, you get 10. Let  $x$  represent the original number.

a. Write an equation that represents the situation.

b. What is the original number?

Algebra- Epperson, week of 4/20-4/24

7. Solve the equation  $-9(x + 6) = -207$ .
8. Use the Distributive Property to solve the equation  $5x - 3(x - 3) = -6 + 6x - 5$ .

9. **Higher Order Thinking** The length of a postage stamp is  $4\frac{1}{4}$  millimeters longer than its width. The perimeter of the stamp is  $124\frac{1}{2}$  millimeters.

a. Write the equation that represents the situation.

b. What is the width of the postage stamp?

c. What is the length of the postage stamp?



## Assessment Practice

10. You are given the equation  $2(\frac{1}{2}t + 3) = 1$  to solve as part of a homework assignment.

### PART A

Describe the first step needed to solve the equation.

### PART B

Solve the equation for  $t$ . Show your work.

11. Solve the equation  $2(6 - x) = 3(x - 1)$ .