



University Middle School Math Summer Work

Students entering 6th grade

**Due: Friday August 21, 2020
Please Email sdmoody1@memphis.edu for any
questions or help with specific sections**

6th Grade - Summer Math Packet

Solve each problem.

$$\begin{array}{r} 46 \\ \times 90 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 49 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ \times 76 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ \times 18 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 93 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ \times 51 \\ \hline \end{array}$$

$$\begin{array}{r} 98 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 44 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ \times 78 \\ \hline \end{array}$$

$$\begin{array}{r} 81 \\ \times 59 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ \times 90 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ \times 97 \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 61 \\ \times 83 \\ \hline \end{array}$$

$$\begin{array}{r} 99 \\ \times 92 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ \times 79 \\ \hline \end{array}$$

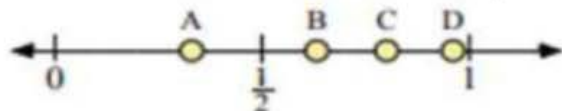
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Solve each problem. Make sure to write your answer as a fraction.

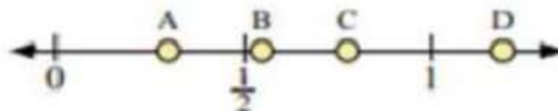
1. A fast food restaurant had 13 pounds of flour. If they split the flour evenly among 3 batches of chicken, how much flour would each batch use? Between what two whole numbers does your answer lie?
2. A teacher had 74 packages of paper she wanted to split equally into 7 piles. How much should be in each pile? Between what two whole numbers does your answer lie?
3. A pet store had 3 cats. If they wanted to split 19 ounces of cat food amongst them, how much should each cat get? Between what two whole numbers does your answer lie?
4. A toy store had 4 boxes that weighed a total 34 kilograms. If each box had the same amount of weight, how much did each box weigh? Between what two whole numbers does your answer lie?
5. A doctor gave his patient liquid medicine and told him to drink 14 cups over the next 4 days. How much should the patient drink each day? Between what two whole numbers does your answer lie?
6. A blanket shop had 27 feet of fabric. If they wanted to use the fabric to make 5 blankets, each the same length, how long would each one be? Between what two whole numbers does your answer lie?
7. Sam had collected 66 leaves to feed to his caterpillar collection. If he wanted to split the leaves equally amongst the 7 cages, how much should he put in each cage? Between what two whole numbers does your answer lie?
8. Downtown, 8 artists were painting a mural that was 86 feet long. If they split the canvas evenly, how much will each artist get to paint? Which two whole numbers does your answer lie between?
9. A farmer had 23 acres he wanted to split amongst his 8 children. If each child gets the same amount of land, how much should each one get? Between what two whole numbers does your answer lie?
10. A sub sandwich maker had a sandwich that was 28 meters long. If he wanted to cut the sub into 3 pieces, each the same length, how long would each be? Between what two whole numbers does your answer lie?

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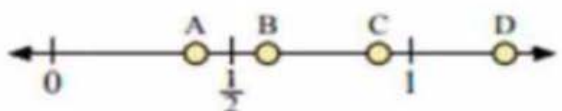
Use the number lines to answer the questions.



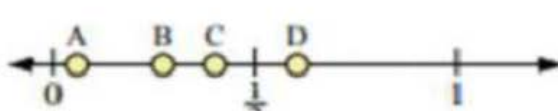
1. Which letter best represents the location of 0.8?
2. Which letter best represents the location of 0.96?



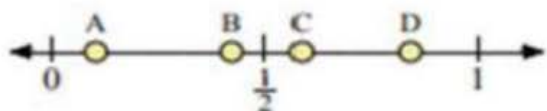
3. Which letter best represents the location of 0.3?
4. Which letter best represents the location of 0.55?



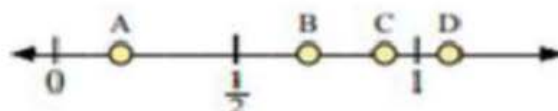
5. Which letter best represents the location of 0.6?
6. Which letter best represents the location of 0.40?



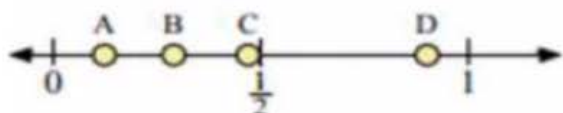
7. Which letter best represents the location of 0.4?
8. Which letter best represents the location of 0.27?



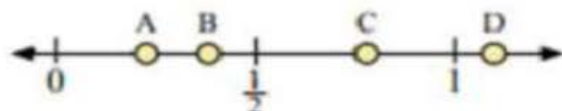
9. Which letter best represents the location of 0.10?
10. Which letter best represents the location of 0.84?



11. Which letter best represents the location of 0.7?
12. Which letter best represents the location of 0.91?



13. Which letter best represents the location of 0.90?
14. Which letter best represents the location of 0.29?



15. Which letter best represents the location of 1.10?
16. Which letter best represents the location of 0.78?

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Solve each problem.

1. Tom walked 4.72 kilometers during the two days he was at the fair. On the first day he walked 1.62 kilometers. How far did he walk the second day?
2. On Monday and Tuesday the lake received 14.78 inches of water. If it received 10.88 inches on Monday, how much did it receive on Tuesday?
3. Jerry weighted the candy he and his brother got from Halloween. Together they received 17.08 kgs of candy. If Jerry's amount was 8.78 kg how much was his brothers?
4. During a science experiment, Mary found the mass of two rocks to be 40.87 grams and 48.3 grams. What is the total mass of these two rocks?
5. Sarah was measuring how much taller she got over two years. In the first year she grew 5.2 cm. In the second year she grew 8.4 cm. How much taller did she get altogether?
6. Roger and Bianca were running a relay race. The race was 15.59 kilometers total. If Roger ran 6.99 kilometers how far did Bianca run?
7. Henry was making some brownies and cupcakes for his school fundraiser. If the brownies needed 4.26 cups of sugar and the cupcakes needed 5.1 cups, how much sugar would he need altogether?
8. Megan was buying food for her birthday party. She bought a 98.86 oz bag of barbeque chips and a 56.3 oz bag of regular chips. How many ounces did she buy all together?
9. A scientist was measuring the daily sodium values of different foods. If a soda had 33.54% the daily value and fries have 36.9% the daily value, how much would they have together?
10. A computer programmer had two files with a total size of 78.7 gigabytes. If one of the files was 47.50 gigabytes, how big is the second file?

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Solve each problem.

1. If $10 \times 5 = 50$, then $0.01 \times 0.005 =$ _____
2. If $10 \times 5 = 50$, then $0.01 \times 0.5 =$ _____
3. If $6 \times 3 = 18$, then $0.006 \times 0.003 =$ _____
4. If $4 \times 9 = 36$, then $0.04 \times 0.009 =$ _____
5. If $4 \times 5 = 20$, then $0.04 \times 0.005 =$ _____
6. If $10 \times 9 = 90$, then $0.01 \times 0.9 =$ _____
7. If $4 \times 7 = 28$, then $0.4 \times 0.007 =$ _____
8. If $7 \times 8 = 56$, then $0.7 \times 0.08 =$ _____
9. If $2 \times 10 = 20$, then $0.002 \times 1 =$ _____
10. If $7 \times 4 = 28$, then $0.7 \times 0.4 =$ _____
11. If $6 \times 2 = 12$, then $0.06 \times 0.2 =$ _____
12. If $6 \times 2 = 12$, then $0.06 \times 0.02 =$ _____
13. If $3 \times 10 = 30$, then $0.3 \times 0.01 =$ _____
14. If $7 \times 7 = 49$, then $0.7 \times 0.07 =$ _____
15. If $9 \times 4 = 36$, then $0.009 \times 0.04 =$ _____
16. If $8 \times 7 = 56$, then $0.8 \times 0.007 =$ _____
17. If $3 \times 2 = 6$, then $0.3 \times 0.2 =$ _____
18. If $10 \times 7 = 70$, then $0.1 \times 0.7 =$ _____
19. If $2 \times 2 = 4$, then $0.2 \times 0.02 =$ _____
20. If $10 \times 2 = 20$, then $0.01 \times 0.002 =$ _____

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Calculate each product.

$$\begin{array}{r} 2.3 \\ \times 4.6 \\ \hline \end{array}$$

$$\begin{array}{r} 0.67 \\ \times 0.50 \\ \hline \end{array}$$

$$\begin{array}{r} 0.27 \\ \times 73 \\ \hline \end{array}$$

$$\begin{array}{r} 2.8 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 3.1 \\ \times 94 \\ \hline \end{array}$$

$$\begin{array}{r} 6.5 \\ \times 6.6 \\ \hline \end{array}$$

$$\begin{array}{r} 3.3 \\ \times 0.89 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 5.4 \\ \times 0.19 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 14 \\ \hline \end{array}$$

$$\begin{array}{r} 5.8 \\ \times 4.3 \\ \hline \end{array}$$

$$\begin{array}{r} 0.46 \\ \times 0.50 \\ \hline \end{array}$$

$$\begin{array}{r} 53 \\ \times 7.8 \\ \hline \end{array}$$

$$\begin{array}{r} 3.0 \\ \times 0.49 \\ \hline \end{array}$$

$$\begin{array}{r} 87 \\ \times 0.21 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 0.12 \\ \hline \end{array}$$

$$\begin{array}{r} 84 \\ \times 18 \\ \hline \end{array}$$

$$\begin{array}{r} 6.7 \\ \times 0.95 \\ \hline \end{array}$$

$$\begin{array}{r} 0.83 \\ \times 8.9 \\ \hline \end{array}$$

$$\begin{array}{r} 1.2 \\ \times 0.54 \\ \hline \end{array}$$

$$\begin{array}{r} 0.13 \\ \times 4.3 \\ \hline \end{array}$$

$$\begin{array}{r} 0.89 \\ \times 0.34 \\ \hline \end{array}$$

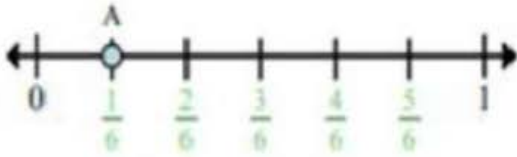
$$\begin{array}{r} 0.31 \\ \times 0.93 \\ \hline \end{array}$$

$$\begin{array}{r} 8.1 \\ \times 16 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ \times 0.76 \\ \hline \end{array}$$

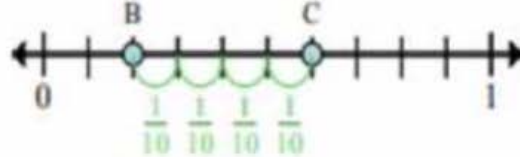
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Determine which letter best shows the location of the fraction.



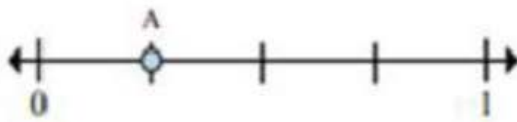
Ex. This number line is divided into how many pieces? **6**

Ex. What is the location of A (written as a fraction)? **$\frac{1}{6}$**

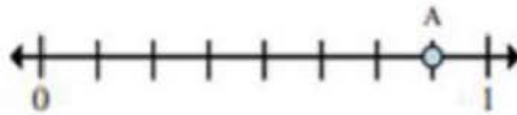


Ex. On this number line what is the value of 0 written as a fraction? **$\frac{0}{10}$**

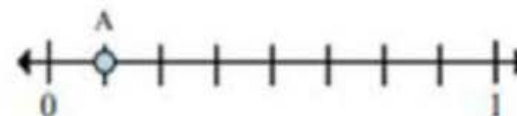
Ex. On this number line from B to C is how far (written as a fraction)? **$\frac{4}{10}$**



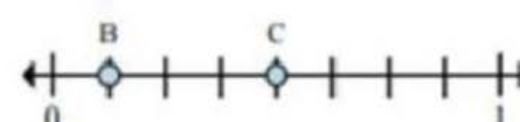
1. This number line is divided into how many pieces?
2. What is the location of A (written as a fraction)?



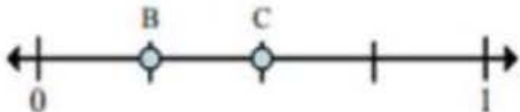
5. This number line is divided into how many pieces?
6. What is the location of A (written as a fraction)?



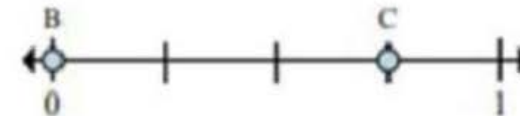
9. This number line is divided into how many pieces?
10. What is the location of A (written as a fraction)?



3. On this number line what is the value of 0 written as a fraction?
4. On this number line from B to C is how far (written as a fraction)?



7. On this number line what is the value of 0 written as a fraction?
8. On this number line from B to C is how far (written as a fraction)?

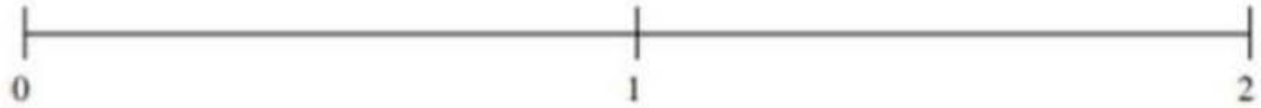


11. On this number line what is the value of 1 written as a fraction?
12. On this number line from B to C is how far (written as a fraction)?

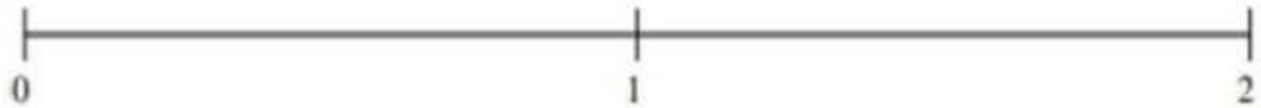
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Order each set of fractions using the number line.

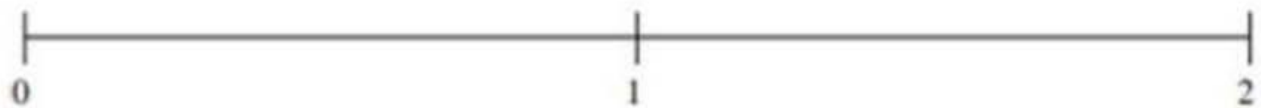
$$\frac{1}{2}, \frac{4}{5}, \frac{1}{5}, 1\frac{3}{10}, 1\frac{9}{10}$$



$$1\frac{1}{2}, 1\frac{4}{5}, \frac{2}{5}, \frac{7}{10}, 1\frac{1}{5}$$



$$\frac{1}{2}, \frac{4}{5}, \frac{1}{5}, 1\frac{3}{5}, 1\frac{1}{10}$$



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Solve each problem. Write the answer as a mixed number fraction (if possible).

1. $\frac{2}{5} - \frac{1}{3} =$

2. $\frac{4}{5} - \frac{1}{2} =$

3. $\frac{10}{12} - \frac{2}{3} =$

4. $\frac{1}{2} - \frac{1}{5} =$

5. $\frac{8}{10} - \frac{2}{4} =$

6. $\frac{4}{6} - \frac{1}{12} =$

7. $\frac{3}{6} + \frac{3}{8} =$

8. $\frac{10}{12} + \frac{1}{2} =$

9. $\frac{4}{5} + \frac{5}{12} =$

10. $\frac{5}{6} + \frac{6}{12} =$

11. $\frac{1}{3} + \frac{2}{6} =$

12. $\frac{7}{8} + \frac{8}{10} =$

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Convert the mixed number fraction to improper fraction.

$$3\frac{2}{5}$$

First multiply the denominator times the whole number.

$$5 \times 3 = 15$$

$$3\frac{17}{5}$$

Next, add your answer from step 1 to your numerator.

$$15 + 2 = 17$$

$$\frac{17}{5}$$

Get rid of your whole number. And now you have your improper fraction.

$$3\frac{7}{8} = \frac{31}{8}$$

$$5\frac{6}{7} =$$

$$4\frac{1}{9} =$$

$$8\frac{6}{7} =$$

$$9\frac{3}{9} =$$

$$4\frac{7}{9} =$$

$$6\frac{3}{6} =$$

$$1\frac{1}{2} =$$

$$2\frac{2}{6} =$$

$$6\frac{8}{10} =$$

$$5\frac{2}{6} =$$

$$6\frac{1}{4} =$$

$$2\frac{2}{5} =$$

$$10\frac{6}{9} =$$

$$1\frac{6}{9} =$$

$$4\frac{4}{5} =$$

$$9\frac{3}{7} =$$

$$6\frac{4}{7} =$$

$$5\frac{3}{6} =$$

$$3\frac{2}{5} =$$

$$4\frac{2}{3} =$$

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1. Sara and Harry are putting together a puzzle. Sara put together $\frac{7}{12}$ of the puzzle pieces. Harry put together $\frac{7}{24}$ of the puzzle pieces. What fraction of the total number of puzzle pieces has NOT been used?
2. Tom makes a cake for a class party. The recipe calls for $\frac{5}{8}$ cup of orange juice and $\frac{5}{12}$ cup of water. Can Tom use a one-cup container to hold both the orange juice and water at the same time? Explain your thinking.
3. Ms. Johnson gives $\frac{1}{6}$ of 1 pizza to each of her 25 students.
 - a. Write a multiplication expression to represent the total number of pizzas Ms. Johnson gives to her students.
 - b. How many pizzas does Ms. Johnson give to her students?
 - c. On the figure below, shade the total number of pizzas Ms. Johnson gives to her students.

