

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

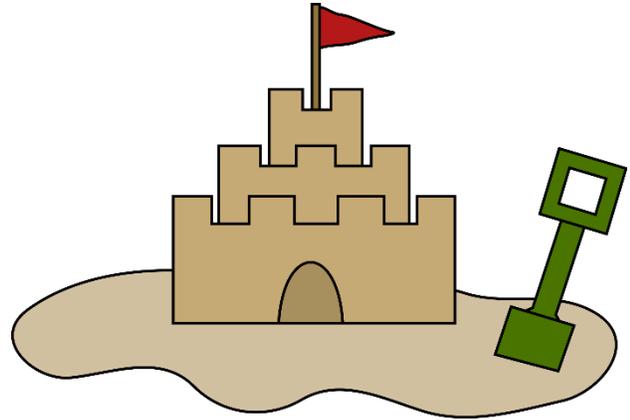
## Rising 7<sup>th</sup> Grade Summer Bridge Work 2018

**Directions:** Each week there is a set of problems to be completed. You must show all work on a separate piece of paper. Please have a heading for each new week so it is clear which problems belong to which week.

**Due:** Hand in to your math teacher on the first day of school.

### Week 1: 6/12 – 6/18

1. Simplify the expression:  $4^2 - 3(3) + 7$
2. Simplify the expression:  $4.08 - 3(1.4) + 7.99$
3. Simplify the expression:  $97.2 \div 1.2 - 90$
4. Write the following in word form: 6.237
5.  $1\frac{3}{7} \times 2\frac{4}{9}$
6.  $\frac{2}{8} \div \frac{9}{4}$
7.  $-\frac{3}{7} \times \frac{9}{13}$
8.  $1\frac{5}{11} \div -\frac{5}{17}$
9. Simplify:  $\frac{1}{5} + \frac{2}{10} \times \frac{3}{5}$
10. A gear on a machine makes  $2\frac{2}{3}$  turns in one minute. How many turns does this gear make in  $4\frac{1}{2}$  minutes?



11. There are 30 students in Shari's homeroom. Of these students  $\frac{2}{5}$  worked at the school fair. How many students in Shari's homeroom worked the school fair?

**Week 2: 6/19 – 6/24**

Solve for the missing variable. Graph the solution if you are solving an inequality.

1.  $\frac{2}{3}x = 4$

2.  $2 + y > -14$

3.  $b - 33 = 18$

4.  $12x = -36$

5.  $2.178 - x = 98.3$

6.  $1\frac{3}{7}x = \frac{2}{4}$

7.  $\frac{x}{8.3} < 2.74$

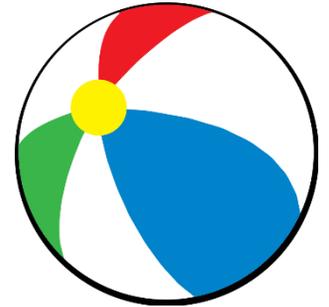
8.  $7x - 11 = -32$

9.  $5p - 2 = 18$

10.  $\frac{y}{4.25} + 15 = -17$

11.  $10m - \frac{2}{5} = 9\frac{3}{5}$

12.  $\frac{a}{4} + 3 \leq -2$



13. The sale price of a CD is \$11.49. This is \$3.50 less than the regular price. What is the regular price? Write an equation and solve.

14. Missy wants to save at least \$150 this month. She has saved \$112 so far. Write and solve an inequality to find how much more money she would like to save this month.

15. The cost of a pay-per-view concert on television is \$39.95. Five friends decide to watch the concert together and split the cost equally. What amount will each friend pay?

**Week 3: 6/26 – 7/2**

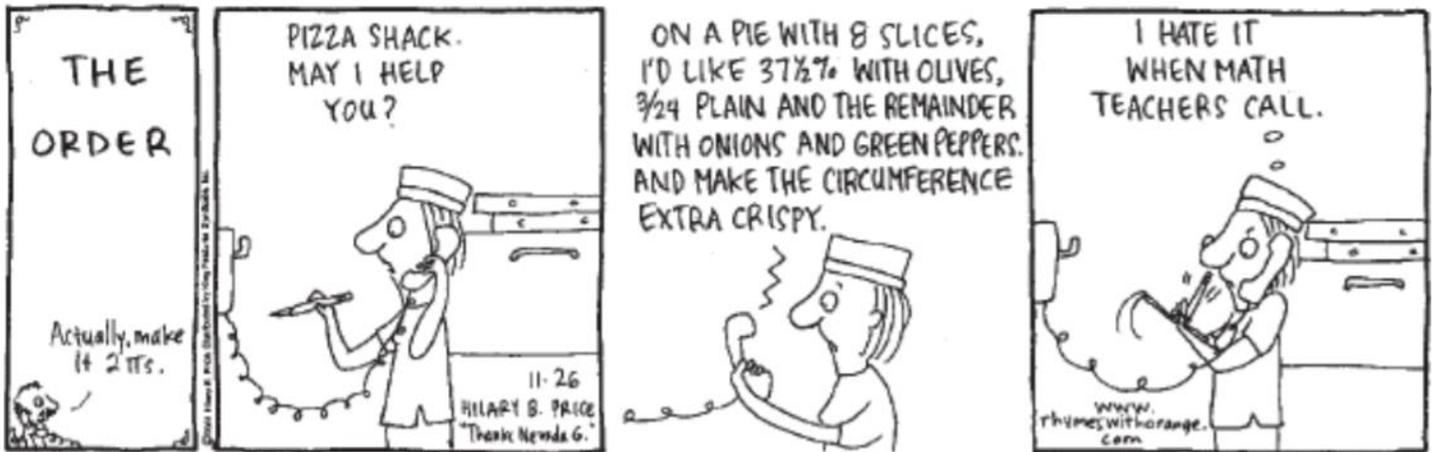


1. Find the prime factorization of 90.
2. Find the prime factorization of 42.
3. Find the GCF of 48 and 64
4. Find the GCF of 84 and 90
5. Find the LCM of 14 and 21
6. Simplify the expression:  $6(x - 7)$
7. Simplify the expression:  $-3(x + 10) - 12$
8. You buy paper plates, napkins, and cups for a party. Plates come in packages of 15. Cups come in packages of 20, and napkins come in packages of 120. You want to have the same number plates, cups, and napkins. How many packets of each item do you need. (HINT: Find the LCM)
9. The cost of a pay-per-view concert on television is \$39.95. Five friends decide to watch the concert together and split the cost equally. Write an equation and solve for the amount that each friend will pay?
10. A volunteer divides 18 adults, 27 girls, and 36 boys into groups to clean up the park. He divides the adults, girls and boys equally among the groups. What is the greatest possible number of groups he can make?

**Week 4: 7/3 – 7/9**

1. Write 45% as a decimal. (show your work ....don't just move the decimal point)
2. Write 89% as a fraction in simplest form.
3. Write  $\frac{1}{4}$  as a percent.
4. What is 30% of 60?

5. 12 is 80% of what number?
6. Solve the proportion.  $\frac{3}{4} = \frac{x}{12}$
7. During a school trip, there are 3 teachers and 25 students on each buss. Write each ratio in three ways.
- Teachers to students
  - Students to teachers
8. Jack drinks 2 quarts of milk every 3 days. How long will it take him to drink 3 gallons of milk?
9. An airplane is flying at 450 miles per hour. How many yards does the airplane fly in 30 minutes?
10. Use the cartoon below to complete the table.



Topping	With Olives	Plain	With Onions and Green Peppers
Percent of the Pizza	■	■	■
Number of Slices	■	■	■

**Week 5: 7/10 – 7/16**

1. Order the following from least to greatest:  $-0.087$  ,  $-2.07$ ,  $|-2.8|$ ,  $2.09$
2. On Friday Rosa borrowed \$10 from her sister. The next day she paid back \$5. Then on Monday she borrowed \$4 more. How much did Rosa owe then?
3. In four hours, a hiker in a canyon goes from 892 ft. to 256 ft above the canyon floor. Find the hiker's vertical speed. See the formula for vertical speed below.

$$\text{Vertical Speed} = \frac{\text{Final Elevation} - \text{Initial Elevation}}{\text{Time}}$$

Simplify each expression.

4.  $-41 + 44.2$

5.  $4590 \div (-54)$

6.  $87 + -3$

7.  $3 - (-66)$

8.  $\left(-\frac{2}{3}\right)(-9)$

9.  $(-32.5) + (-12.9)$

10.  $15 + (-85)$

11.  $\left(-\frac{1}{8}\right) \div \left(\frac{1}{4}\right)$

12.  $1\frac{2}{3} - 7\frac{1}{9}$

13.  $-\frac{8}{11} + \frac{2}{11}$

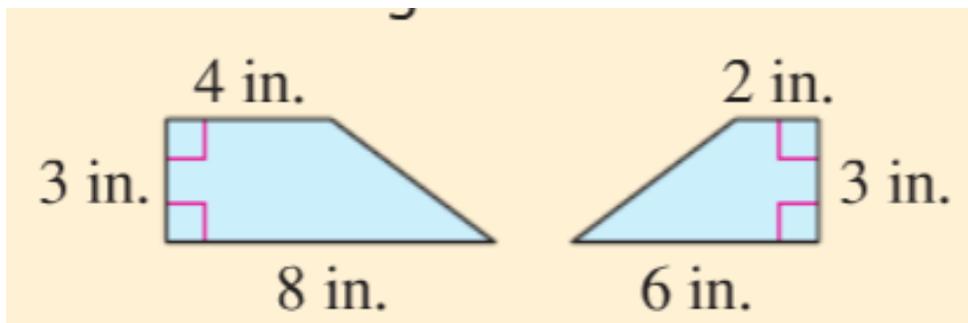


**Week 6: 7/17 – 7/23**

1. Find the surface area of the spaghetti box.

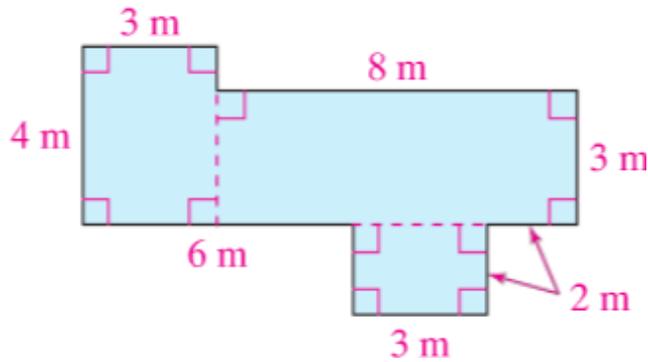


2. As part of a community project, a seventh grade class cleans up a neighborhood park and builds a sand box for the young children. The sand box is 5 feet long, 4 feet 6 inches wide, and  $\frac{2}{3}$  foot tall. What volume sand will fit in the sand box?
3. A rectangular prism has a volume of  $70\text{m}^3$ , a height of  $2\frac{1}{2}\text{m}$  and a width of  $3\frac{1}{2}\text{m}$ . What is the length of the prism?
4. Maddie's garden has two sections. Find the total area of Maddie's garden.



5. What is the perimeter of a rectangle with coordinate (1,4), (1,9), (-2, 9), and (-2, 4)?
6. How is the point (-3, -4) related to the point (-3, 4)?
7. A park is on a triangular plot. The plot has a base of 214m and height of 70 m. What is the area of the plot?

8. Find the area of the figure below.



9.

- What is the formula for the area of a triangle?
- Find the area of a triangle with a  $b = 24$  in. and a  $h = 5$  in.

10. Find the volume of cube shaped jewelry box that has a side length of  $2\frac{1}{2}$  in.

11. Complete the input – output table. Then graph.

$$\text{Output} = \text{Input} - 3$$

Input	Output
-1	
0	
2	
7	

**Week 7: 7/24 – 7/30**

- Measure the height, in inches, of five different cups in your home. Find the mean height.
- The favorite lunch for ten students is: pizza, pizza, chicken, hamburger, chicken, pizza, chicken, pizza, pizza, pizza. Organize the data by making a frequency table. What is the mode?

3. Find the range for the dinner hour of 7 families. 5 7 6 6 8 7 3
4. You keep track of the time you spend doing homework each evening. You spend 58 minutes, 36 minutes, 44 minutes, and 37 minutes. Find the mean of these times.
5. The number of miles that 12 students travel to school each day is 15, 11, 8, 17, 6, 10, 19, 12, 15.5, 22, 16, and 20.
- Construct a box-and-whisker plot to represent the data
  - What is unit of the measurement for this set of data?
  - What fraction of the students travel to school more than 18 miles each day?
6. The table shows the number of minutes that Samuel spends on the computer each day for a month. Construct a histogram to represent the data.

Samuel's Computer Time														
95	4	26	95	4	87	36	47	26	51	23	18	45	81	76
24	57	7	16	63	70	20	45	16	32	37	64	8	28	44

7. Write an example of the associate property of addition and the commutative property of addition.

