Directions: Circle the number of the problems that you completed & return them to your homeroom teacher on the first week of school.

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1. Show 4 different ways to make $1.56 using coins and/or bills.

2. Apple has 598,500 employees in the U.S. Round the number of employees to the given place values:
   Thousand _____
   Ten Thousand _____
   Hundred Thousand _____
   Explain why two of your answers are the same.

3. Make a set of flash cards of multiplication facts. Practice your facts with a friend.

4. Have a scavenger hunt for five real-world examples of both parallel lines (e.g., railroad tracks) and perpendicular lines (e.g., the segments that meet meeting to make a square floor tile). Make a table to show your findings.

5. A) Find the area of your bedroom floor. B) What room in your house could have twice the area of your bedroom? Check and record.

6. Find three ways to make a dollar with 50 coins. What coins did you use? How many of each?

7. Create a multi-step story problem that uses more than one operation (i.e., addition, subtraction, multiplication, and/or division). Have a friend solve it.

8. Make a graph to show the number of items in your home that have right angles, obtuse angles, or acute angles.

9. Design and draw a playground. Show the dimensions of the playground (i.e., length and width in feet) and of each section of the playground (e.g., an area for swings).

10. Make a paper airplane and fly it at least 25 times. Measure how far in feet it goes. Record distances with a line plot. Include fractions for distances that do not measure exactly a whole number (e.g., 6 ¼, 6 ½, or 6 ¾ feet).

11. It costs $2.75 to ride the T. If you ride 2 times a day for the month of August, how much would you spend?

12. A) Find a graph in the newspaper, on the internet, or on a cell phone app. Cut and paste it, or draw it. B) Write three statements about the graph.

13. Draw pictures (e.g., a fraction bar divided into equal parts, with some shaded) that represent five different fractions.

14. Measure the perimeter of two different windows in your home. Find the difference between the perimeters of the larger and smaller window.

15. Kate's garden is in the shape of a square with a perimeter of 32 feet. A) What are the length and width of her garden? B) What is the area of her garden? C) What dimensions (i.e., length and width) would double the area of the garden? Find that area to prove it doubled.

16. As best you can, draw a right triangle, an equilateral triangle, a square, a parallelogram, and a trapezoid.

17. Estimate how many jumping jacks you can do in a minute. Then actually try it. What factors affect how many you can do in a minute?

18. The teacher is arranging 36 chairs into a rectangular array for a performance. A) What are all the possible arrangements of the 36 chairs without any left over? (For example, 4 rows of 9 chairs each would work.) B) Explain why placing the chairs in 7 rows would not work.

19. Find a recipe and double the amount of each ingredient that is needed. Write both the original and doubled ingredients.

20. Take a walk in your neighborhood or look around your house. Find things that are symmetrical. Draw or sketch what you found and include the line of symmetry. Look for at least 5 things.

21. Show 5 different ways to make $2.35 using coins and/or bills.

22. Keep a log of how many hours and minutes you sleep each night for a week. Calculate the total at the end of the week.

23. Make a number line from 0 to 6 that is also labeled carefully in halves and fourths. A ruler can help you divide the parts evenly. For example, between 1 and 2, you would have 1 ¼ , 1 ½ , and 1 ¾ .

24. Make up a story problem involving division. Have a friend or family member solve it.

25. A) If you skip count by 6, what are the first 10 numbers you get? B) If you skip count by 12, what are the first 10 numbers you get? C) Try skip counting by 0.25. What are the first 10 numbers you get.

26. Draw a design that is symmetric. You may want to start with a line of symmetry (e.g., you could use the crease you get when you fold a piece of paper in half).

27. If it costs $26.95 for rides at Six Flags: A) Estimate what it would it cost for 6 people. B) Then find the actual amount. C) Was your estimate reasonable? Explain.

28. Find a cardboard box in your house. Find the dimensions of the box (i.e., length, width, and height) in inches and in centimeters.

29. Flip a coin 25 times and record how many tails and heads you got. B) What fraction of the flips were heads? What fraction of the flips were tails? C) Flip the coin another 25 times. Were the results the same?

30. Hamburgers cost $2.95 at a restaurant and fries cost $1.50. What would four hamburgers and three orders of fries cost?

31. Survey 10 friends or relatives to find out their favorite outdoor activity. Graph the results.

32. If you read this summer for 15 hours, how many minutes would that be?

33. Vowels are worth $30 each and consonants are worth $20 each. A) Can you make three words worth $100? B) Can you make one word worth $200?

34. A) Make a square with a perimeter of 8 inches. B) Make an equilateral triangle with a perimeter of 9 inches.   C) What is the same about squares and equilateral triangles?

35. A) List all the capital letters (e.g., E) that have parallel lines. B) List all the capital letters (e.g., L) that have perpendicular lines.

36. Make the largest number you can with the digits 2, 9, 1, 6, and 8.   B) Make the smallest number you can with the digits 2, 9, 1, 6, and 8. C) Find the difference between these two numbers.

37. Estimate the following in inches: your height; the length of your foot; and the distance from your elbow to the tip of your little finger. Measure to see how close you were.

38. Use a ruler to make a number line from 0 to 6 that is also labeled carefully every 0.25 and 0.5. For example, between 3 and 4, you would have 3.25, 3.5, and 3.75.

39. A) If you multiply a whole number by 23, what whole number would get you closest to 1,000? B) If you multiply a whole number by 47, what whole number would get you closest to 1,000?

40. The blue shark can swim at a speed of 40 miles per *hour*. A) If it swam at this speed for 15 *hours*, how far would it swim? B) If it swam at this speed for 15 *minutes*, how far would it swim? C) How long would it take the shark to travel 90 miles?