

Incoming 6th Grade
Math Packet

Summer Math Challenge

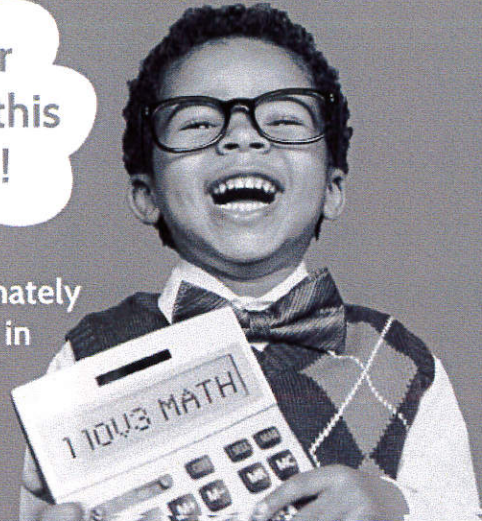


Powered by
The Quantile®
Framework for
Mathematics

Fight Summer
Math Loss with this
Free Program!

On average, all students lose approximately
2.6 months of grade level equivalency in
math skills over the summer months.*

*Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66(3), 227-268.



Join the Summer Math Challenge:

- 1 Go to quantiles.com/summer-math to enroll your child.
- 2 Starting Monday, 6/24, check your inbox for daily emails with fun math activities and resources.
- 3 Visit quantiles.com/summer-math every day to read about the weekly math concept and earn badges.
- 4 When the program ends on Friday, August 2nd, print an award certificate to celebrate your child's summer accomplishment!

The Summer Math Challenge is a free, six-week, email-based, math skills program based on the Common Core State Standards and targeted to students who have just completed 2nd through 5th grades. Parents receive daily emails with fun activities and resources to help kids retain the math skills learned during the previous school year.



The Quantile® Framework for Mathematics
Linking assessment with mathematics instruction



Write Numbers in Words and Digits

Hints/Guide:

In order to read numbers correctly, we need to know the order of each place value. The order is the following:

1,000,000 is one million

10,000 is ten thousand

100 is one hundred

1 is one

0.01 is one hundredth

100,000 is one hundred thousand

1,000 is one thousand

10 is ten

0.1 is one tenth

0.001 is one thousandth

So, the number 354.67 is read as three hundred fifty four and sixty-seven hundredths and 3,500,607.004 is read as three million, five hundred thousand, six hundred seven and four thousandths. Please remember that the word "and" indicates and location of the decimal point in mathematics and should not be used anywhere else (for example, it is inappropriate to read 350 as three hundred and fifty, because "and" means a decimal point). Also, the term "point" in mathematics is a geometry term and should not be used in naming numbers (for example, 3.5 is not three "point" five, but rather three and five tenths).

Exercises:

Write the number name:

1. 560.08

2. 7.016

3. 24.47

4. 6,003

5. 3,005,600.07

Write the number the name represents:

6. Forty-five thousandths

7. Seventeen and seven hundredths

8. Five million, three hundred thousand,
twenty-nine and six tenths

9. Six million and five thousandths

10. Two hundred eight thousand, four

Order Decimals

Hints/Guide:

To compare decimals and list them from least to greatest, it is easier to compare decimals that are the same place value, so one process we can use to compare decimals is to include trailing zeros to make all of the decimals that same place value. For example, to put the following in order from least to greatest:

.3, 1.61, .006, .107 is easier to compare as:

0.300, 1.610, 0.006, 0.107

to achieve 0.006, 0.107, 0.300, 1.610

and then return to the original form: 0.006, 0.107, 0.3, 1.61

Exercises:

List each group of numbers in order from least to greatest:

1. 20, 4, .6, .08

2. 246.8, 248.6, 244.9, 246.5

3. 1.03, 2.4, .89, .987

4. 14.8, 2.68, .879, 8.47

5. 5.3, 5.12, 5.38, 5.29

6. 54.89, 56.3, 58.1, 52.98

7. 4, .006, .8, .07

8. 297, 3.456, 64.4, 7.24

9. 794, 793.8, 794.65, 794.7

10. 9, 6.7, 7.24, 14

11. 4.2, 4.19, 4.07, 4.3

12. 3.75, 6.7, 3.8, .45

Multiply and Divide Whole Numbers

Hints/Guide:

To multiply whole numbers, we must multiply the first number by one digit of the second number. The key is that when multiplying by each digit we must remember the place value of the number we are multiplying by:

$$\begin{array}{r} 534 \\ \times 46 \\ \hline 3204 \\ \underline{21360} \\ 24562 \end{array}$$

So we first multiply 534 by 6 to get 3204 (This is done by regrouping digits similar to adding, so $6 \times 4 = 24$, the 4 is written down and the 2 is added to the next product). Next, a zero is placed in the ones digit because when multiplying by the 4 in 46, we are multiplying by the tens digit, or 40. Next, we multiply 534×4 to get 21360. Finally, we add the two products together to get 24,564.

To divide whole numbers, we must know basic division rules are the opposite of multiplying rules. So if we know our times tables, we know how to divide (a review over the summer might not be a bad idea!). Since 3×4 is 12, then $12 \div 4 = 3$ and $12 \div 3 = 4$. Again, we deal with one digit at a time, so:

$$\begin{array}{r} 634 \\ 12 \overline{) 7608} \\ \underline{-72} \\ 40 \\ \underline{-36} \\ 48 \\ \underline{-48} \\ 0 \end{array}$$

First, we notice that 12 does not divide into 7, so we determine how many times 12 goes into 76. This is 6. Next, multiply 6×12 and place the answer, 72, under the 76 you have used. Now, subtract $76 - 72$ and place the 4 underneath the 72. Bring down the next digit from the number being divided, which is 0, and determine how many times 12 goes into 40. The answer is 3 and $3 \times 12 = 36$, so place 36 under the 40. Now, subtract $40 - 36$ and place the 4 under 36 and bring down the 8. 12 goes into 48 four times evenly, so there is no remainder in this problem.

Exercises: Solve:

No Calculators!

1. $\begin{array}{r} 742 \\ \times 17 \\ \hline \end{array}$

2. $\begin{array}{r} 25 \\ \times 13 \\ \hline \end{array}$

3. $\begin{array}{r} 659 \\ \times 7 \\ \hline \end{array}$

4. $\begin{array}{r} 407 \\ \times 29 \\ \hline \end{array}$

5. $\begin{array}{r} 81 \\ \times 5 \\ \hline \end{array}$

6. $86 \overline{) 2,236}$

7. $57 \overline{) 13,338}$

8. $5 \overline{) 205}$

9. $7 \overline{) 1463}$

10. $16 \overline{) 3840}$

11. $11 \overline{) 2211}$

12. $9 \overline{) 3789}$

Add Mixed Numbers

When adding mixed numbers, we add the whole numbers and the fractions separately, then simplify the answer. For example:

$$\begin{array}{r} 4\frac{1}{3} = 4\frac{8}{24} \\ + 2\frac{6}{8} = 2\frac{18}{24} \\ \hline 6\frac{26}{24} = 6 + 1\frac{2}{24} = 7\frac{2}{24} = 7\frac{1}{12} \end{array}$$

First we convert the fractions to have the same denominators, then add the fractions and add the whole numbers. If needed, we then simplify the answer.

Exercises: Solve in lowest terms:

No Calculators!

SHOW ALL WORK. Use a separate sheet of paper (if necessary) and staple to this page.

1.
$$\begin{array}{r} 2\frac{1}{4} \\ + 8\frac{1}{2} \\ \hline \end{array}$$

2.
$$\begin{array}{r} 3\frac{8}{15} \\ + 7\frac{1}{3} \\ \hline \end{array}$$

3.
$$\begin{array}{r} 3\frac{3}{5} \\ + 5\frac{1}{2} \\ \hline \end{array}$$

4.
$$\begin{array}{r} 5\frac{3}{8} \\ + 4\frac{1}{4} \\ \hline \end{array}$$

5.
$$\begin{array}{r} 7\frac{3}{7} \\ + 6\frac{1}{2} \\ \hline \end{array}$$

6.
$$\begin{array}{r} 5\frac{5}{9} \\ + 1\frac{1}{3} \\ \hline \end{array}$$

7.
$$\begin{array}{r} 4\frac{1}{3} \\ + 6\frac{1}{4} \\ \hline \end{array}$$

8.
$$\begin{array}{r} 1\frac{2}{3} \\ + 6\frac{1}{4} \\ \hline \end{array}$$

9.
$$\begin{array}{r} 1\frac{2}{9} \\ + 5\frac{2}{3} \\ \hline \end{array}$$

Hints/Guide:

Subtract Mixed Numbers

When subtracting mixed numbers, we subtract the whole numbers and the fractions separately, then simplify the answer. For example:

$$\begin{array}{r} 7\frac{3}{4} = 7\frac{18}{24} \\ - 2\frac{15}{24} = 2\frac{15}{24} \\ \hline 5\frac{3}{24} = 5\frac{1}{8} \end{array}$$

First we convert the fractions to have the same denominators, then subtract the fractions and subtract the whole numbers. If needed, we then simplify the answer.

Exercises: Solve in lowest terms:

No Calculators!

SHOW ALL WORK. Use a separate sheet of paper (if necessary) and staple to this page.

1.
$$\begin{array}{r} 4\frac{1}{3} \\ - 2\frac{1}{4} \\ \hline \end{array}$$

2.
$$\begin{array}{r} 6\frac{3}{4} \\ - \frac{2}{3} \\ \hline \end{array}$$

3.
$$\begin{array}{r} 9\frac{2}{3} \\ - 6\frac{1}{4} \\ \hline \end{array}$$

4.
$$\begin{array}{r} 6\frac{3}{4} \\ - 5\frac{1}{5} \\ \hline \end{array}$$

5.
$$\begin{array}{r} 7\frac{1}{2} \\ - 3\frac{1}{4} \\ \hline \end{array}$$

6.
$$\begin{array}{r} 3\frac{1}{2} \\ - 2\frac{3}{10} \\ \hline \end{array}$$

7.
$$\begin{array}{r} 9\frac{7}{10} \\ - 4\frac{1}{2} \\ \hline \end{array}$$

8.
$$\begin{array}{r} 8\frac{5}{6} \\ - 5\frac{1}{3} \\ \hline \end{array}$$

9.
$$\begin{array}{r} 6\frac{3}{4} \\ - 6\frac{5}{8} \\ \hline \end{array}$$

Add and Subtract Decimals

Hints/Guide:

When adding and subtracting decimals, the key is to line up the decimals above each other, add zeros to have all of the numbers have the same place value length, then use the same rules as adding and subtracting whole numbers, with the answer having a decimal point in line with the problem. For example:

$$\begin{array}{r} 34.5 \\ 34.500 \\ 34.5 + 6.72 + 9.045 = 6.72 = 6.720 \\ + 9.045 \quad + 9.045 \\ \hline 50.265 \end{array} \qquad \text{AND} \qquad \begin{array}{r} 5 - 3.25 = 5.00 \\ - 3.25 \\ \hline 1.75 \end{array}$$

Exercises: Solve:

No Calculators!

SHOW ALL WORK. Use a separate sheet of paper (if necessary) and staple to this page.

1. $15.7 + 2.34 + 5.06 =$

2. $64.038 + 164.8 + 15.7 =$

3. $2.6 + 64.89 + 4.007 =$

4. $12.9 + 2.008 + 75.9 =$

5.
$$\begin{array}{r} 543.8 \\ 27.64 \\ + 6.9 \\ \hline \end{array}$$

6. $2.6 + 4.75 =$

7. $43.31 + 7.406 =$

8.
$$\begin{array}{r} 64.9 \\ 343.6 \\ + 6.007 \\ \hline \end{array}$$

9. $6.45 + 54.9 =$

10. $3.8 + .76 + .008 =$

11. $87.4 - 56.09 =$

12. $5.908 - 4.72 =$

13. $68.9 - 24.74 =$

14. $955.3 - 242.7 =$

15.
$$\begin{array}{r} 695.42 \\ - 44.79 \\ \hline \end{array}$$

16. $432.97 - 287.32 =$

17. $43.905 - 9.08 =$

18.
$$\begin{array}{r} 78.9 \\ - 54.7 \\ \hline \end{array}$$

19. $200 - 14.96 =$

20. $15 - 2.43 =$

Use Information from Tables and Graphs

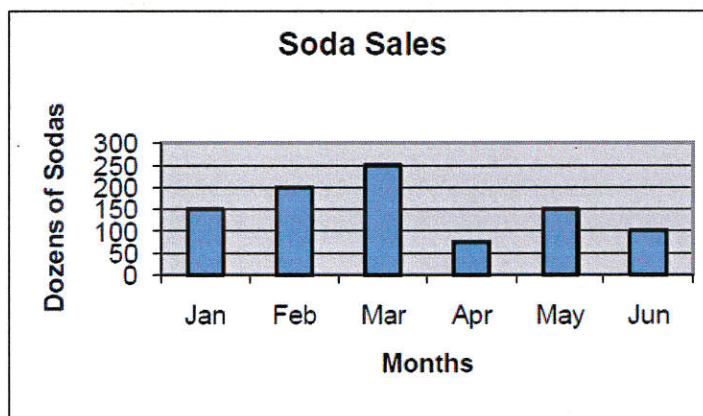
Hints/Guide:

To use information from tables and graphs, we must locate the information in the correct section of the table or graph, then be sure that we are answering the correct question.

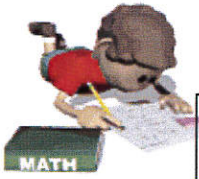
Exercises:

Approximate Distance in Kilometers				
City	Annapolis	Baltimore	Richmond	New York
Annapolis	-	40	175	300
Baltimore	40	-	210	280
Richmond	175	210	-	460
New York	300	280	460	-

1. What is the distance from New York to Annapolis?
2. Which is greater: the distance from New York to Baltimore or the distance from Richmond to Annapolis?
3. Which two cities on the chart are the farthest apart?



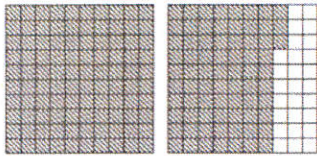
4. What is the difference in sales between March and April?
5. Which two months appear to have identical sales?



<p>1. The local school system bought 2726 computers. Then they decided to buy 1000 more computers. How many computers did they buy in all?</p> <p>a) 2727 b) 2737 c) 2826 d) 3726</p>	<p>2. Jade drove 5296 miles in her car. Mariah drove 100 fewer miles than Jade. How many miles did Mariah drive?</p> <p>a) 4296 b) 5196 c) 5396 d) 6296</p>
<p>3. Which is another name for 8207?</p> <p>a) $820 + 7$ b) $820 + 70$ c) $8000 + 200 + 7$ d) $8000 + 200 + 70$</p>	<p>4. Which means the same as 39 hundreds?</p> <p>a) 309 b) 390 c) 3090 d) 3900</p>
<p>5. Which means the same as 3147?</p> <p>a) 2 thousands, 14 hundreds, 7 ones b) 3 thousands, 11 hundreds, 47 tens c) 3 thousands, 14 hundreds, 7 tens d) 2 thousands, 11 hundreds, 47 ones</p>	<p>6. 32 tens and 19 ones can also be expressed as</p> <p>a) 329 b) 339 c) 3219 d) 3319</p>
<p>7. In which number does the 3 have the greatest value?</p> <p>a) 3265 b) 2356 c) 2653 d) 6532</p>	<p>8. What is the value of 3 in the number 4329?</p> <p>a) 3000 b) 300 c) 30 d) 3</p>
<p>9. The value of 7856 would change by how much if the 8 were replaced by 9?</p> <p>a) 100 b) 1000 c) 800 d) 9000</p>	<p>10. The value of 2463 would change by how much if 5 replaced 2?</p> <p>a) 1000 b) 2000 c) 3000 d) 4000</p>

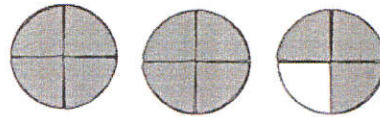
11. The shaded portion of the figures below shows what decimal number?

Each $\square = 0.01$



- a) 0.33
- b) 1.27
- c) 1.57
- d) 1.73

12. The shaded portion of this picture represents what decimal number?







- a) 3.00
- b) 2.75
- c) 2.50
- d) 2.25

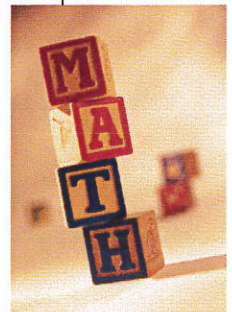
13. The shaded part of this picture shows what numeral or mixed number?



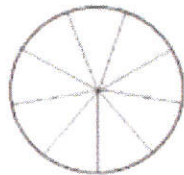
- a) 2
- b) $2\frac{1}{4}$
- c) $2\frac{1}{2}$
- d) $2\frac{6}{8}$

14. Which picture shows $\frac{3}{4}$ shaded?

- a) 
- b) 
- c) 
- d) 



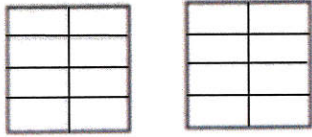
15. Shade in $\frac{1}{3}$ of the figure below.



16. Draw a ring around $\frac{3}{4}$ of the footballs.



17. Shade in $1\frac{1}{4}$ of the figures.



18. Mrs. Fitzpatrick surveyed her class and found out that $\frac{3}{8}$ of her students like cake. Which of the following also describes this situation?

- a) 12 out of 24 students like cake
- b) 15 out of 25 students like cake.
- c) 9 out of 27 students like cake.
- d) 9 out of 24 students like cake.

19. In one survey, 75 out of 100 people said they saved money every month. Which of the following could this statement be describing?

- a) $\frac{1}{2}$ of the people saved money.
- b) $\frac{1}{4}$ of the people saved money.
- c) $\frac{3}{8}$ of the people saved money.
- d) $\frac{3}{4}$ of the people saved money.

20. $\frac{29}{8} =$

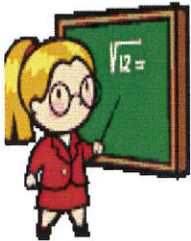
- a) $1\frac{1}{2}$
- b) $2\frac{3}{4}$
- c) $3\frac{5}{8}$
- d) $4\frac{7}{8}$

21. $8\frac{3}{4} =$

- a) $\frac{38}{4}$
- b) $\frac{35}{4}$
- c) $\frac{20}{8}$
- d) $\frac{28}{8}$

22. King Kong was 7.31 meters tall. Which **best** describes his height?

- a) About $6\frac{1}{2}$ meters tall
- b) A little more than 6 meters tall
- c) A little less than 7 meters tall
- d) Almost $7\frac{1}{2}$ meters tall





23. Zach used $3\frac{5}{8}$ ounces of rubber cement. Which **best** describes this amount?

- a) About $2\frac{1}{2}$ ounces
- b) A little less than 3 ounces
- c) About $3\frac{1}{2}$ ounces
- d) A little more than 4 ounces

24. Mr. Glasser earned \$42,859 last year. This number is **closest** to

- a) \$41,000
- b) \$42,000
- c) \$43,000
- d) \$44,000

25. A Pacific leatherback turtle weighed 704.2 kilograms. This number is **closest** to

- a) 704
- b) 705
- c) 706
- d) 707

26. A snowstorm dropped 12.87 inches of snow on Chappaqua in one day. This amount is **about**

- a) 11 inches
- b) 12 inches
- c) 13 inches
- d) 14 inches

27. The table below shows the average wind speeds at various US weather stations.

City	Average Speed (mph)
Spokane, WA	8.9
Washington, D.C.	9.4
Chicago, IL	10.4
Hartford, CT	8.4

New York City's average wind speed is greater than Spokane's and less than Washington's. Which could be New York City's average wind speed?

- a) 8.7
- b) 9.3
- c) 9.7
- d) 10.3

28. This chart shows how many pounds of strawberries Sue and her friends picked last weekend.

Person	Pounds of Strawberries
Sue	$3\frac{1}{4}$
Tess	$3\frac{5}{8}$
Dana	$2\frac{7}{8}$
Pete	$3\frac{1}{2}$

Who picked the **most** strawberries?

- a) Sue
- b) Tess
- c) Dana
- d) Pete

29. The museum director made the chart below to show the attendance on Saturdays in December.

DATE	ATTENDANCE
Dec. 1	8086
Dec. 8	4299
Dec. 15	3963
Dec. 22	1042
Dec. 29	8795

About how many people attended the museum on a Saturday in December?

- a) 22,000
- b) 26,000
- c) 29,000
- d) 35,000

30. Draw an X on the number line that best represents $\frac{2}{3}$.



31. Kelly's class collected 75 cans every month for 12 months. To find the total number of cans collected, you would

- a) subtract 12 from 75.
- b) add 75 to 12.
- c) multiply 75 by 12.
- d) divide 75 by 12.

32. Basketball shoes that normally sell for \$48.99 a pair were on sale for \$39.50 a pair. Which number sentence would you use to find how much less the sale price is?

- a) $\$48.99 + \$39.50 =$
- b) $\$48.99 - \$39.50 =$
- c) $\$48.99 \times \$39.50 =$
- d) $\$48.99 \div \$39.50 =$

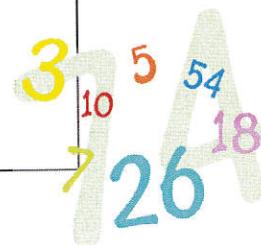
33. $60 \times 10 =$

- a) 600
- b) 660
- c) 6000
- d) 6600

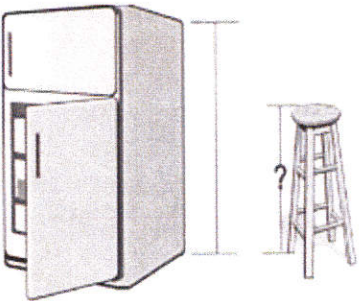
34. $700 \times 10 =$

- a) 700
- b) 770
- c) 7000
- d) 7700

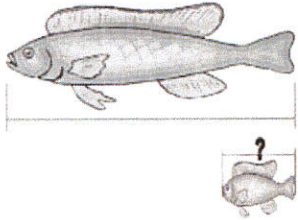
<p>35. $80 \div 10 =$</p> <p>a) 800 b) 100 c) 10 d) 8</p>	<p>36. $300 \div 10 =$</p> <p>a) 3 b) 30 c) 300 d) 3000</p>
<p>37. $\\$8.36 \times 7 =$</p> <p>a) 58 b) 58.52 c) 5.852 d) 5.08</p>	<p>38.</p> $6 \overline{)924}$ <p>a) 15 b) 15.5 c) 1.54 d) 154</p>
<p>39.</p> $\begin{array}{r} 7\frac{5}{8} \\ -3\frac{1}{8} \\ \hline \end{array}$ <p>a) $4\frac{6}{8}$ b) $4\frac{1}{4}$ c) $4\frac{1}{2}$ d) 4</p>	<p>40.</p> $2\frac{5}{8} + 5\frac{1}{8}$ <p>a) $7\frac{6}{16}$ b) $7\frac{1}{2}$ c) $7\frac{3}{4}$ d) $7\frac{7}{8}$</p>
<p>41. Shelley needs to subtract 27,241 from 62,739. Which of the following would be best for Shelley to use to estimate the difference?</p> <p>a) $60,000 - 20,000$ b) $60,000 - 30,000$ c) $70,000 - 20,000$ d) $70,000 - 30,000$</p>	<p>42. Mrs. Mancuso bought $4\frac{7}{8}$ pounds of potatoes on Monday and $8\frac{1}{4}$ pounds on Tuesday. Which of the following would be best for Mrs. Mancuso to use to estimate how many pounds of potatoes she bought?</p> <p>a) $4 + 8$ b) $5 + 8$ c) $4 + 9$ d) $5 + 9$</p>





<p>43. Alexandria needs to subtract 5.2 from 9.7. Which of the following would be best for Alexandria to use to estimate the difference?</p> <p>a) $9 - 6$ b) $9 - 5$ c) $10 - 5$ d) $10 - 6$</p>	<p>44. To estimate the product of 125 and 812, Alfredo multiplied 100×800. Will Alfredo's estimate be more or less than the actual product?</p> <p>a) less, because he rounded both numbers up b) less, because he rounded both numbers down c) more, because he rounded both numbers up d) more, because he rounded both numbers down</p>
<p>45. Barbie bought $4\frac{1}{8}$ pounds of white chocolate and $3\frac{1}{6}$ pounds of milk chocolate. About how many pounds of chocolate is that?</p> <p>a) a little less than 7 b) a little more than 7 c) a little less than 8 d) a little more than 8</p>	<p>46. The Little League Game ended at 2:45 PM. If the game lasted $3\frac{1}{2}$ hours, at what time did it begin?</p> <p>a) 11:15 AM b) 11:45 AM c) 12:30 PM d) 12:45 PM</p>
<p>47. Mr. Walle drove to New York City. He left at 7:40 AM and arrived at 12:25 PM. How long was the trip?</p> <p>a) 3 hours, 15 minutes b) $3\frac{1}{2}$ hours c) $4\frac{1}{4}$ hours d) 4 hours, 45minutes</p>	<p>48. If the refrigerator is 60 inches high, about how tall is the stool?</p>  <p>a) 10 inches b) 25 inches c) 40 inches d) 75 inches</p>

49. If the larger fish is 12 inches long, **about** how long is the smaller fish?



- a) 15 in
- b) 8 in
- c) 6 in
- d) 3 in

50. If the shaded area is 24 square units, **about** how large is the large white area?



- a) 144 square units
- b) 168 square units
- c) 192 square units
- d) 288 square units



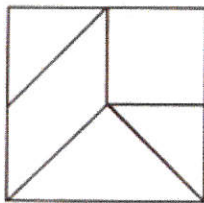
51. What is the **best** unit to measure the amount of water in a swimming pool?

- a) gallon
- b) pint
- c) quart
- d) fluid ounce

52. A pole is 520 centimeters tall. How many meters is that?

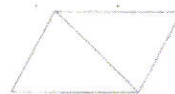
- a) 0.52
- b) 5.20
- c) 52.0
- d) 520.0

53. The figure below is made up of which shapes?



- a) 3 squares, 1 rectangle, 1 parallelogram,
- b) 3 triangles, 1 rectangle, 1 rhombus
- c) 3 triangles, 1 trapezoid, 1 rhombus
- d) 3 triangles, 1 square, 1 parallelogram

54. What shape is formed by these two figures?



- a) hexagon
- b) parallelogram
- c) rhombus
- d) trapezoid

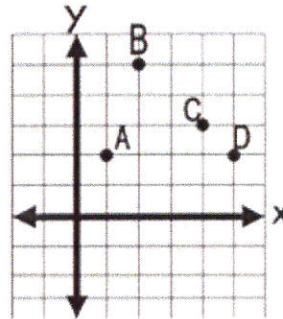
55. Which figure is congruent to figure A below?



- a)
- b)
- c)
- d)



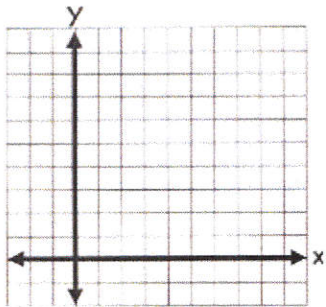
56. What letter is located at (2,5)?



- a) A
- b) B
- c) C
- d) D



57. Write the letter A at point (3,6)



58. The graph shows how many shirts were sold during the week.

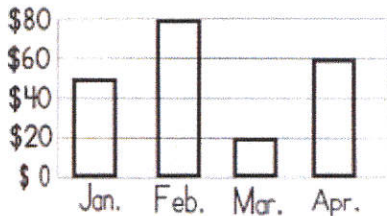
SHIRTS ON SALE	
Days	Number of Shirts
Monday	J
Tuesday	J J J
Wednesday	J J J J
Thursday	J J J J J J
Friday	J J

J = 25 Shirts

Which two days sold a total of 225 shirts?

- a) Monday and Wednesday
- b) Tuesday and Friday
- c) Monday and Thursday
- d) Tuesday and Thursday

59. The graph shows how much money the sixth graders made selling school pins. How much money was made altogether?



- a) \$190
- b) \$200
- c) \$210
- d) \$220

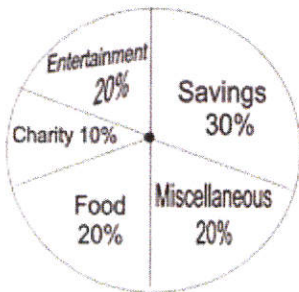
60. The table shows the number of people living in Connecticut cities.

City	Number of People
Bristol	60,722
Fairfield	58,407
Hamden	58,626
Meriden	58,962
Manchester	55,390

How many cities have populations **greater** than 58,500?

- a) 2
- b) 3
- c) 4
- d) 5

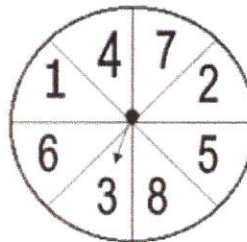
61. Ned made this circle graph to show his parents how he spends his \$10.00 weekly allowance.



Which statement is a **reasonable** conclusion from the data on the graph?

- a) Ned spends more on charity than on food.
- b) Ned spends more on entertainment than on miscellaneous items.
- c) Ned spends less on food than on savings.
- d) Ned spends equal amounts on entertainment and on savings.

62. Tomas and José used the spinner below to play a game. If the arrow lands on an even number, Tomas gets 1 point. José gets 1 point if the arrow lands on an odd number. Is this fair?



- a) Yes, because José spins first.
- b) No, because the arrow is most likely to land on an even number.
- c) No, because the arrow is most likely to land on an odd number.
- d) Yes, because the probabilities are equal.



63. The chart below shows record auto speeds from 1990. If you picked one of these autos at random, what is the probability that the one chosen would go faster than 700 kilometers per hour?

NAME OF AUTO	SPEED (kilometers per hour)
The Blue Flame	1016
American Spirit	988
Sonic I	674
Mercedes	327

- a) $\frac{1}{4}$
- b) $\frac{1}{2}$
- c) $\frac{3}{4}$
- d) $\frac{3}{8}$

64. Stacy, Jack, Ann, and Tim have different color hair.

- One has red hair;
- One has brown hair;
- One has blond hair; and
- One has black hair.
- One girl has brown hair.
- Ann has blond hair.
- Tim does not have red hair.

Who has black hair?

- a) Jack
- b) Ann
- c) Stacy
- d) Tim

65. Which number sentence is part of the same **family of facts** as the number sentence below?

$$456 - \square = 234$$

- a) $456 - 234 = \square$
- b) $456 + \square = 234$
- c) $234 - \square = 456$
- d) $\square + 456 = 234$

66. What is the value of \square in the equation below?

$$\square - 62 = 62$$

- a) 0
- b) 1
- c) 124
- d) 3

67. Use the clues to figure out the mystery 5-digit number.

- It is greater than 50,000 and less than 60,000.
- The hundreds digit is the largest digit.
- It reads the same forwards and backwards.

- a) 4 5, 6 5 6
- b) 5 4, 9 2 0
- c) 5 6, 7 6 5
- d) 5 8, 1 7 5

68. Andy, Bill, Casey and David raced to the park.

- Andy arrived after Casey.
- Bill got there after David but before Casey

Who got to the park first?

- a) Andy
- b) Bill
- c) Casey
- d) David



<p>69. Hannah has to finish reading a 224-page book for English in 2 weeks. If she reads an equal number of pages every day including weekends, how many pages does he have to read each day?</p> <p>a) 14 pages b) 22 pages c) 16 pages d) 19 pages</p>	<p>70. Mrs. Miller has 138 stickers to be distributed evenly to her 23 students. How many stickers will each student get?</p> <p>a) 4 stickers b) 6 stickers c) 8 stickers d) 12 stickers</p>
<p>71. Andy wants to equally share 108 origami objects he made among the 9 friends who came to his birthday party. How many origami objects will they each get?</p> <p>a) 8 origami objects b) 9 origami objects c) 11 origami objects d) 12 origami objects</p>	<p>72. Zack Cannon's family bought 5 smoothies that cost \$3.99 each in a summer carnival, how much did Mr. Cannon have to pay the vendor?</p> <p>a) \$19.95 b) \$18.95 c) \$21.95 d) \$22.95</p>
<p>73. Later the Cannons bought 2 hot dogs for \$ 1.99 each, 3 hamburgers for 3.45 each and 4 ice creams for 3.99 each. How many did they spend?</p> <p>a) \$ 9.43 b) \$10. 43 c) \$ 20.29 d) \$ 30.29</p>	<p>74. Mrs. Goldstein and her neighbors went to a national park for a picnic. She gave the clerk at the park entrance \$100 for a fee of \$59.50. How much change did she receive?</p> <p>a) \$ 41.50 b) \$ 30.50 c) \$ 40.50 d) \$ 31.50</p>
<p>75. Mrs. Goldstein later spilt the entrance fee of \$59.50 equally with 6 other families. How much should each family pay?</p> <p>a) \$ 8.50 b) \$ 9.90 c) \$ 8.90 d) \$ 9.50</p>	<p>76. $345.89 - (76.4 + 52.13) =$</p> <p>a) 286.12 b) 217.36 c) 339.913 d) 321.62</p>