



### THIRD GRADE

#### GRADE LEVEL EXPECTATIONS IN MATHEMATICS

When entering fourth grade this is what is expected that your child should already know.

1. Read, write and order numbers to 10,000 in both numerals and words.
2. Identify the place value of a digit in a number. Example: 3,241, the 2 is in the hundreds place.
3. Recognize and use expanded notation for numbers to 9,999. Example: 2,517 is 2,000 + 500 + 10 + 7; and 4 hundreds and 2 ones is 402.
4. Can count orally by 6's to 72, 7's to 84, 8's to 96 and 9's to 108. From previous years they should already know how to count by 2's, 3's, 4's, 5's and 10's.
5. Know even numbers end in 0, 2, 4, 6, or 8 and odd numbers end in 1, 3, 5, 7, or 9.
6. Add and subtract **fluently** two numbers with regrouping through 999.
7. Can estimate the sum or difference of two numbers with 3 digits (rounding the numbers then adding or subtracting them).
8. Know multiplication facts through  $10 \times 10$  **fluently**.
9. Understand multiplication and division fact families and the inverse relationship of these two operations (just like addition and subtraction). Example:  $3 \times 8 = 24$ , the  $24 \div 8 = 3$  and  $24 \div 3 = 8$ .
10. Can solve  $7 \times \underline{\quad} = 42$  or  $12 \div \underline{\quad} = 4$  using the above inverse relationship between multiplication and division as stated in #9. Example:  $7 \times \underline{\quad} = 42$  think  $42 \div 7 = 6$  so  $7 \times 6 = 42$ .
11. Mentally calculate a product up to a three-digit number (even hundreds) by a one digit number. Example:  $500 \times 3$  ( $5 \times 3 = 15$  then add 2 zeros at the end for 1500) or  $70 \times 4$  ( $7 \times 4 = 28$  then add a zero for 280).
12. Understand basic fractions and the terms numerator and denominator.
13. Recognize, name and use equivalent fractions with denominators 2, 4 and 8. Can use fraction strips.
14. Recognize that addition and subtraction of fractions with same denominators. Example  $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ .
15. When dealing with money, can relate fractions, decimals with dollars. Example:  $\frac{1}{2}$  dollar = \$0.50, fifty cents and;  $\frac{1}{4}$  dollar = \$0.25, one quarter, 25 cents.
16. Add and subtract money in dollars and cents.
17. Use common units of measurements in length, weight, and time. Example: 12 inches = 1 foot; 3 feet = 1 yard; 16 ounces = 1 pound; 60 minutes = 1 hour; 24 hours = 1 day; 12 months = 1 year.
18. Know benchmark temperatures such as freezing ( $32^{\circ}\text{F}$ ,  $0^{\circ}\text{C}$ ); boiling ( $212^{\circ}\text{F}$ ,  $100^{\circ}\text{C}$ ).
19. Know that meters and centimeters are measurement like feet and inches; kilograms and grams are weight like pounds; liters and milliliters are like ounces (capacity of liquid).
20. Can calculate the perimeter of a square or rectangle. Perimeter is the outer edge; you add the lengths of the 4 sides.
21. Understand that area of a square or rectangle is the space in the middle (length x width).
22. Identify perpendicular and parallel lines. Perpendicular- two lines that form a right angle.   
Parallel- two lines that will never cross they go along side one another. 
23. Identify two-dimensional shapes: parallelogram, trapezoid, circle, rectangle, square, and rhombus.
24. Identify three-dimensional solids: cube, rectangular prism, sphere, pyramid, and cone. Faces are the flat surface, edges are the straight folds where 2 faces come together, vertices is the point where 3 or more edges come together.
25. Read and interpret bar graphs
26. Knows maximum, minimum and range of a set of values. Range is the largest subtract the smallest.

**Excellent websites for fun learning and reinforcement of math skills:**

[www.wildmath.com](http://www.wildmath.com) Select "Play the game". Select addition, subtraction or multiplication and grade. You can race to beat your time.

[www.harcourtschool.com](http://www.harcourtschool.com) Click the red box, select math, select HSPMath, select Michigan, click on the "3" ball or "4" ball for a challenge. Select a game.

[www.aplusmath.com](http://www.aplusmath.com) Go under "Flashcards" or "Game Room" on the left side of the screen. They can practice adding, subtracting and multiplying. Very important to know the addition, subtraction and multiplication facts from memorization or within a couple seconds.

[www.mathisfun.com](http://www.mathisfun.com) Select numbers then Math Trainer for adding, subtracting and multiplication. Or at the home screen select games and pick a game to play.

[www.eduplace.com](http://www.eduplace.com) Select your state – "Michigan" press submit. Select the student tab then click on the "mathematics" rectangle. Click in the center book "Houghton Mifflin Math 2007", Click on "Grade 3. Select any games. Extra Help and Extra Practice is good, also eGames.

[www.illuminations.nctm.org](http://www.illuminations.nctm.org) Select activities then select grade level. Click on Search.

[www.aaamath.com](http://www.aaamath.com) At the top pick "Third" or "Fourth" for a challenge. Choose any of the activities like multiplication then select "play" option toward the top of the screen. 20 Questions and Countdown games are good ones.

[www.funbrain.com](http://www.funbrain.com) Lots of fun games to choose from.

**Other games and activities you can play:**

- Take a deck of cards and remove the face cards (kings, queens, jacks). Aces are one. Divide the cards evenly among 2 players. Each player flips over a card. The first one to add the 2 numbers correctly wins the cards. After going through the pile of cards, the player with the most cards wins. You can do a multiplication version also.

## TERMS

**Sum:** the answer to an addition problem.

**Difference:** the answer to a subtraction problem.

**Product:** answer to a multiplication problem.

**Quotient:** answer to a division problem.

**Edges:** This is all the straight lines of a figure. Like the edge of a desk, where 2 faces come together.

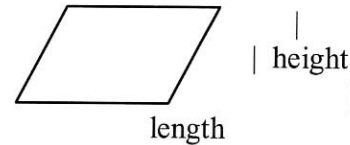
**Faces:** This is the flat surface of a figure.

**Vertex:** This is all the corners of a figure. The point where 3 or more edges come together.

**Perimeter:** You add up all the sides. (You are adding all lengths of the outer edges together.)

**Area:** Area of a square or rectangle = length (l) x width (w) answer is written in "square inches" (or whatever the measurement is)

Area of a parallelogram  is length x height.  
Answer written in "square inches" (or whatever measurement)



**Median:** Arrange numbers from smallest to largest. What number is in the middle? That is the Median number.

**Mode:** What number occurs most often? This number is the mode.

**Range:** Subtract the largest number in the group from the smallest number in the group.  
This number is the range.

**Maximum:** Largest number in the set of numbers.

**Minimum:** Smallest number in the set of numbers.

### **Conversion:**

60 seconds = 1 minute

60 minutes = 1 hour

24 hours = 1 day

12 months = 1 year

12 inches = 1 foot

3 feet = 1 yard

10 millimeter = 1 centimeter (approx. 3 1/2 centimeters = 1 inch)

100 centimeter = 1 meter (approx. 1 meter = 1 yard)

## Entering 4<sup>th</sup> Grade Summer Math Packet

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

4<sup>th</sup> Grade Teacher: \_\_\_\_\_

I have checked the work completed: \_\_\_\_\_  
 Parent Signature

**DO NOT use a calculator when completing this packet.**

1. Write the products: Practice any you do not know quickly.

4	8	11	2	2	7	10	12	6	5	9	5	0
<u>x2</u>	<u>x4</u>	<u>x2</u>	<u>x5</u>	<u>x3</u>	<u>x5</u>	<u>x3</u>	<u>x4</u>	<u>x3</u>	<u>x4</u>	<u>x4</u>	<u>x3</u>	<u>x2</u>

3	9	2	5	7	10	6	5	11	1	4	8	11
<u>x3</u>	<u>x5</u>	<u>x7</u>	<u>x5</u>	<u>x4</u>	<u>x4</u>	<u>x4</u>	<u>x2</u>	<u>x5</u>	<u>x3</u>	<u>x5</u>	<u>x2</u>	<u>x4</u>

6	8	6	3	9	10	12	3	7	4	9	4	12
<u>x5</u>	<u>x4</u>	<u>x2</u>	<u>x4</u>	<u>x3</u>	<u>x2</u>	<u>x3</u>	<u>x5</u>	<u>x3</u>	<u>x4</u>	<u>x2</u>	<u>x3</u>	<u>x2</u>

2. Mrs. Count was born in the year one thousand, nine hundred forty-two. In what year was she born?
- 1429
  - 1492
  - 1924
  - 1942
3. Which correctly completes the number sentences?  $53,277 < \underline{\hspace{2cm}}$
- 49,999
  - 50,400
  - 52,388
  - 61,003
4. Which number is fifty-two thousand, three hundred nine?
- 5,239
  - 52,039
  - 52,309
  - 52,390
5. What is the digit in the ten-thousands place of the number 68,173?
- 1
  - 6
  - 8

6. What is the place value of the 8 in the number 5,280?
- A. ones
  - B. tens
  - C. hundreds
  - D. thousands
7. Which number is equal to 5,912?
- A. 5 hundreds, 9 tens, and 12 ones
  - B. 5 thousands, 91 hundreds, and 12 ones
  - C. 5 thousands, 9 hundreds, and 12 ones
  - D. 5 thousands, 9 hundreds, 1 ten, and 2 ones
8. The number 9,036 is equal to which of the following?
- A.  $900 + 30 + 6$
  - B.  $90 + 30 + 6$
  - C.  $9000 + 30 + 6$
9. Which number means 7 thousands, 4 tens and 5 ones?
- A. 745
  - B. 7,045
  - C. 7,450
10. Which number goes in the blank to make the statement below true?
- $$5,642 < \underline{\hspace{2cm}} < 6,633$$
- A. 6,931
  - B. 5,610
  - C. 6,745
  - D. 5,841
11. When counting by 6's, which of the following patterns is correct?
- A. 0, 6, 12, 16, 22, 28, 34
  - B. 0, 6, 12, 18, 25, 31, 37
  - C. 0, 6, 12, 18, 24, 30, 36
12. What number comes next in this pattern 41, 43, 45, 47, \_\_\_\_\_?
- A. 48
  - B. 49
  - C. 50
13. Which number can be shared in two equal groups with no remainder?
- A. 85
  - B. 490
  - C. 223
14. Martina has a new box of 64 crayons. She drops the box and 17 crayons are broken. How many crayons are **NOT** broken?
- A. 47 crayons
  - B. 57 crayons
  - C. 53 crayons
  - D. 81 crayons

15. How much is  $2,470 + 1,423$ ? Show your work.

- A. 1,053
- B. 3,763
- C. 3,893

Remember “bottom bigger better borrow” when subtracting. Do you need to borrow from the tens?

16a. 82 subtract 65 =

- A. 17
- B. 23
- C. 27
- D. 13

16b. 61 subtract 18 =

- A. 52
- B. 57
- C. 43
- D. 47

17a. 80 subtract 34 =

- A. 54
- B. 46
- C. 56

17b. 85 subtract 64 =

- A. 19
- B. 21
- C. 11

18. How much are  $8,965$  subtracting  $3,525$ ? Show your work.

- A. 5,440
- B. 5,480
- C. 6,440
- D. 12,490

19. The lunchroom serves only hamburgers and pizza on Mondays. Last Monday, 314 students bought a lunch. There were 97 students who bought hamburgers. Which of the following is *closest* to the number of students who bought pizza?

- A. 100 students
- B. 200 students
- C. 300 students
- D. 400 students

20. The best estimate of the sum of 389 and 403 is:

- A. 600
- B. 700
- C. 800
- D. 900

21. Which division statement is related to  $6 \times 4$ ?

- A. 24 divided by 4
- B. 64 divided by 4
- C. 10 divided by 6
- D. 24 divided by 3

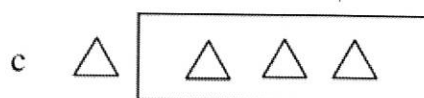
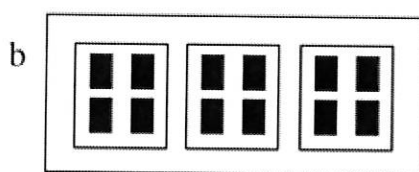
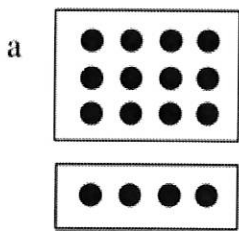
22. The division  $354$  divided by  $6$  can be used to solve which of the following problems?

- A. How many school children there will be if 6 new students enroll at a school with 354 students?
- B. How many school children will there be in a school if 6 students move away from a school with 354 students?
- C. How many tables for 6 are needed to sit 354 people?
- D. How many celery plants are planted in 6 rows if each row has 354 plants?

23. There are 36 pieces of gum in a bag. Mom empties the bag by giving 6 pieces to each of her children. How many children does she have?
- A.  $36 \text{ divided by } 6 = 6 \text{ children}$
  - B.  $36 + 6 = 42 \text{ children}$
  - C.  $36 \text{ divided by } 9 = 4 \text{ children}$
  - D.  $36 - 30 = 6 \text{ children}$
24. A classroom has 5 rows of desks with 5 desks in each row. Which number sentence shows how to figure this out?
- A.  $5 + 5 = 10 \text{ desks}$
  - B.  $5 \times 5 = 25 \text{ desks}$
  - C.  $2 \times 5 = 10 \text{ desks}$
  - D.  $5 \text{ divided by } 5 = 25 \text{ desks}$
25. Which of the following is a true statement?
- A.  $8 \times 2 = 4 \times 4$
  - B.  $1 \times 1 = 1 + 1$
  - C.  $10 \times 3 = 10 + 10$
  - D.  $6 \times 6 = 5 \times 5 + 1$
26. There are 8 socks in Vic's drawer. How many pairs are there?
- A. 2
  - B. 3
  - C. 4
  - D. 16
27. Which of the following is true?
- A.  $6 \times 3 = 4 \times 4$
  - B.  $20 - 5 = 19 - 3$
  - C.  $9 + 8 = 10 + 7$
  - D.  $2 \times 3 = 2 + 3$
28. Which multiplication fact can be used to find the answer to  $56 \div 7$ ?
- A.  $7 \times 5$
  - B.  $7 \times 8$
  - C.  $56 \times 7$
29. Susie wants to share 30 candies among 6 friends. How many candies will each friend get?
- A. 8
  - B. 7
  - C. 6
  - D. 5
30. What is the missing number in the problem  $54 \text{ divided by } \underline{\hspace{1cm}} = 6$ ?
- A. 7
  - B. 8
  - C. 9

31. What is the missing number in the problem  $7 \times \underline{\quad} = 56$
- A. 7  
B. 8  
C. 9
32. Solve this problem in your head:  $500 \times 6 =$
- A. 300  
B. 530  
C. 3000
33. John had exactly 32 pennies. He sorted the pennies into stacks of 5 pennies each. How many pennies were left over?
- A. 37  
B. 6  
C. 2  
D. 0
34. 27 students want to join teams for relay races. Each team must have 4 students. How many complete teams can be made? Would any students be left out, if any?
- A. 5 complete teams with 2 students left out  
B. 6 complete teams with 3 students left out  
C. 7 complete teams with 0 students left out
35. May has 10 eggs that she can use to make cookies for the bake sale. Each cookie recipe calls for 3 eggs. How many full recipes can she make and how many eggs will be left over, if any?
- A. 2 full recipes with 4 eggs left over  
B. 3 full recipes with no eggs left over  
C. 3 full recipes with 1 egg left over

36. Which picture represents the equation  $12 \div 3 = 4$ ?



37. A teacher marks 10 of her students' tests every half hour. It takes her one and one half hours to mark all her students' tests. How many students are in her class?
- A. 5  
B. 15  
C. 20  
D. 30



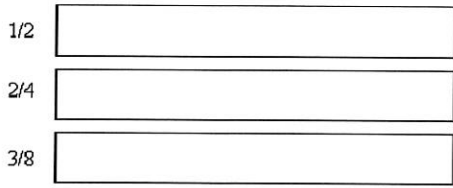
38. What fraction is shown by this strip?



- A.  $\frac{3}{4}$       B.  $\frac{3}{6}$       C.  $\frac{3}{7}$

39. Which of these two fractions are equivalent? Draw fraction strips to help you figure this out.

$\frac{1}{2}$        $\frac{2}{4}$        $\frac{3}{8}$

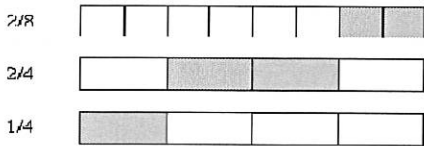


- A.  $\frac{1}{2} = \frac{2}{4}$       B.  $\frac{1}{2} = \frac{3}{8}$       C.  $\frac{2}{4} = \frac{3}{8}$

40. Since  $4 \times 10 = 40$ , and  $40 \times 5 = 200$ , then which of the following is true?

- A.  $14 \times 45 = 200$   
 B.  $4 \times 10 \times 40 = 200$   
 C.  $4 \times 10 \times 5 = 200$   
 D.  $40 \times 10 \times 5 = 200$

41. Which two of these fractions are equivalent?



- A.  $\frac{2}{8} = \frac{2}{4}$       B.  $\frac{2}{8} = \frac{1}{4}$       C.  $\frac{2}{4} = \frac{1}{4}$

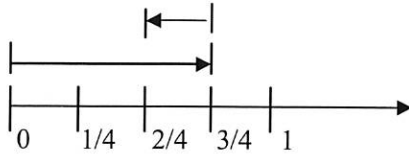
42. Which set shows fractions ordered from least to greatest? Draw a picture.

A.  $\frac{1}{4}, \frac{1}{2}, \frac{6}{8}$

B.  $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$

C.  $\frac{1}{2}, \frac{2}{4}, \frac{3}{8}$

43. Which number sentence is best represented by the model below?



- A.  $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$
- B.  $\frac{3}{4} - \frac{1}{4} = \frac{3}{4}$
- C.  $\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$
- D.  $\frac{3}{4} + \frac{2}{4} = \frac{3}{4}$

44. Which group of fractions is in order from least to greatest? Draw a picture.

- A.  $\frac{2}{2}$ ,  $\frac{3}{8}$ ,  $\frac{3}{4}$
- B.  $\frac{2}{2}$ ,  $\frac{3}{4}$ ,  $\frac{3}{8}$
- C.  $\frac{3}{4}$ ,  $\frac{3}{8}$ ,  $\frac{2}{2}$
- D.  $\frac{3}{8}$ ,  $\frac{3}{4}$ ,  $\frac{2}{2}$

45. Which set shows fractions ordered from least to greatest? Draw a picture.

- A.  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{6}{8}$
- B.  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$
- C.  $\frac{1}{2}$ ,  $\frac{2}{4}$ ,  $\frac{3}{8}$

46. Insert <, >, or = in the following blank lines. Draw a picture to help you.

- A.  $\frac{1}{5}$  \_\_\_\_\_  $\frac{1}{9}$
- B.  $\frac{1}{6}$  \_\_\_\_\_  $\frac{1}{3}$
- C.  $\frac{4}{5}$  \_\_\_\_\_  $\frac{2}{5}$
- D.  $\frac{1}{2}$  \_\_\_\_\_  $\frac{2}{4}$
- E.  $\frac{2}{6}$  \_\_\_\_\_  $\frac{4}{6}$

47. How many half dollars are there in \$4.50?

- A. 9 half dollars
- B. 18 half dollars
- C. 10 half dollars

48. Ben, Susan, Alex and Tonya each received  $\frac{1}{4}$  of a dollar. How much is that?

- A. \$25
- B. \$.025
- C. \$0.25
- D. \$2.5

49. Eva has \$4.00 to spend on apples. Each apple costs \$0.50. How many apples can Eva buy?

- A. 2
- B. 4
- C. 6
- D. 8

50. Which coins does 0.50 and 0.25 represent?

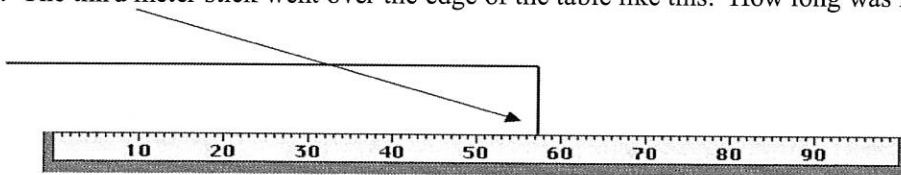
- A. 2 quarters and 2 dimes
- B. 1 nickel and 1 quarter
- C. 1 half dollar and 1 quarter
- D. 5 dimes and 1 nickel

51. Ron, Nita, Donna and David shared \$1.00 equally. What was the exact amount each one received?  
 A. \$0.25  
 B. \$0.30  
 C. \$0.50  
 D. \$0.75
52. Michelle has a string which is 3 feet and 8 inches long and John has a string which is two feet and six inches long. How much longer is Michelle's string?  
 A. 2 inches  
 B. 10 inches  
 C. 1 foot and 2 inches  
 D. 1 foot and 10 inches

53. \_\_\_\_\_ days in a week                      \_\_\_\_\_ minutes in an hour                      \_\_\_\_\_ ounces in a pound  
 \_\_\_\_\_ months in a year                      \_\_\_\_\_ inches in a foot                      \_\_\_\_\_ seconds in a minute  
 \_\_\_\_\_ hours in a day                      \_\_\_\_\_ feet in a yard                      \_\_\_\_\_ weeks in a year

54. Mike began his bike ride at 2:40 p.m. and finished the ride at 3:20 p.m. How many minutes did Mike ride?  
 A. 20 minutes  
 B. 40 minutes  
 C. 60 minutes

55. Beth was using meter sticks to measure a long table in her classroom. She put the meter sticks end to end three times. The third meter stick went over the edge of the table like this. How long was her table?



- A. 3 Meters  
 B. 58 Centimeters  
 C. 58 Meters  
 D. 2 Meters 58 Centimeters
56. What is the date two weeks after June 8?

JUNE						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

- A. June 10  
 B. June 15  
 C. June 22

57. Mary has a piano recital on May 25. Today is April 28. How long must she wait before the recital day?

APRIL						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- A. 3 weeks 2 days  
 B. 3 weeks 6 days  
 C. 4 weeks 2 days

58. Joey is meeting Tom at the movies at 1:45. The clock below shows what time it is now. How much time does Joey have to wait before he meets Tom?



- A. 4 hours 45 minutes  
 B. 5 hours 20 minutes  
 C. 7 hours 20 minutes
59. Kim's little sister just turned 2 years old today. How many months old is her little sister?  
 A. 2 months  
 B. 12 months  
 C. 24 months
60. Eric's disk measures 27 inches. How many feet and inches is that?  
 A. 1 foot 3 inches  
 B. 2 feet 3 inches  
 C. 2 feet 7 inches
61. Which of the following represents the *greatest* length?  
 A. 10 inches  
 B. 1 ½ inches  
 C. 1 ½ feet  
 D. 1 foot
62. Which of the following is the *shortest* measurement?  
 A. 1 yard  
 B. 2 feet  
 C. 26 inches  
 D. 1 foot 10 inches

63. Write the products. Any that you do not know quickly, practice.

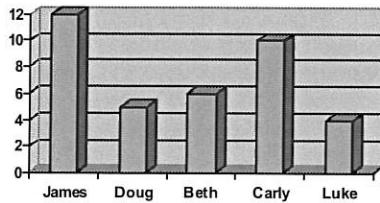
$$\begin{array}{r} 9 \\ \times 8 \end{array} \quad \begin{array}{r} 7 \\ \times 6 \end{array} \quad \begin{array}{r} 5 \\ \times 10 \end{array} \quad \begin{array}{r} 2 \\ \times 7 \end{array} \quad \begin{array}{r} 6 \\ \times 9 \end{array} \quad \begin{array}{r} 7 \\ \times 7 \end{array} \quad \begin{array}{r} 3 \\ \times 8 \end{array} \quad \begin{array}{r} 4 \\ \times 6 \end{array} \quad \begin{array}{r} 5 \\ \times 9 \end{array} \quad \begin{array}{r} 8 \\ \times 7 \end{array} \quad \begin{array}{r} 3 \\ \times 9 \end{array} \quad \begin{array}{r} 11 \\ \times 7 \end{array} \quad \begin{array}{r} 5 \\ \times 7 \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \end{array} \quad \begin{array}{r} 2 \\ \times 9 \end{array} \quad \begin{array}{r} 6 \\ \times 7 \end{array} \quad \begin{array}{r} 4 \\ \times 11 \end{array} \quad \begin{array}{r} 5 \\ \times 6 \end{array} \quad \begin{array}{r} 6 \\ \times 8 \end{array} \quad \begin{array}{r} 4 \\ \times 9 \end{array} \quad \begin{array}{r} 8 \\ \times 8 \end{array} \quad \begin{array}{r} 10 \\ \times 8 \end{array} \quad \begin{array}{r} 3 \\ \times 6 \end{array} \quad \begin{array}{r} 7 \\ \times 8 \end{array} \quad \begin{array}{r} 4 \\ \times 7 \end{array} \quad \begin{array}{r} 7 \\ \times 9 \end{array}$$

$$\begin{array}{r} 2 \\ \times 6 \end{array} \quad \begin{array}{r} 3 \\ \times 12 \end{array} \quad \begin{array}{r} 9 \\ \times 9 \end{array} \quad \begin{array}{r} 8 \\ \times 6 \end{array} \quad \begin{array}{r} 2 \\ \times 8 \end{array} \quad \begin{array}{r} 3 \\ \times 6 \end{array} \quad \begin{array}{r} 9 \\ \times 7 \end{array} \quad \begin{array}{r} 7 \\ \times 8 \end{array} \quad \begin{array}{r} 0 \\ \times 9 \end{array} \quad \begin{array}{r} 2 \\ \times 12 \end{array} \quad \begin{array}{r} 5 \\ \times 8 \end{array} \quad \begin{array}{r} 4 \\ \times 9 \end{array} \quad \begin{array}{r} 6 \\ \times 6 \end{array}$$

64. The graph below shows the number of pet fish owned by 5 friends.

Pet Fish Owned



What was the minimum number of fish owned by one friend?

- A. 12
- B. 10
- C. 4
- D. 2

What was the maximum number of fish owned by one friend?

- A. 12
- B. 10
- C. 4
- D. 2

65. It took Lily 35 hours to drive from Michigan to Texas. How many days and hours did she drive?

- A. 1 day 11 hours
- B. 1 day 19 hours
- C. 3 days 5 hours

66. Brad can long jump 1 meter 9 centimeters. How many centimeters is that?

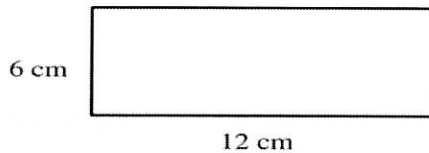
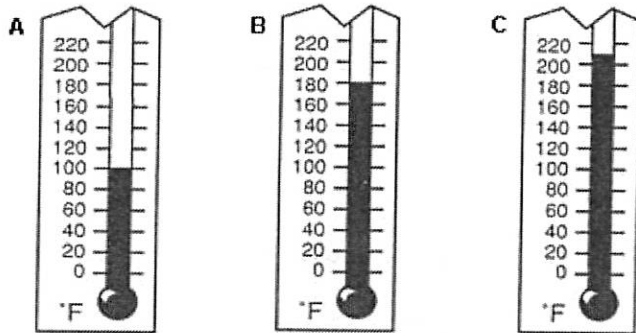
- A. 19 centimeters
- B. 109 centimeters
- C. 1,009 centimeters

67. Which temperature is hotter than the boiling point of water?

- A.  $58^{\circ}\text{C}$
- B.  $98^{\circ}\text{C}$
- C.  $107^{\circ}\text{C}$

68. Chris just put his grape juice in the freezer to make Popsicles. At what temperature will the Popsicles start to freeze?
- 32° F
  - 0° F
  - 32° F
69. Brandon and Ashley are building a snowman on their day off of school. Which is the best estimate of the outdoor temperature?
- 20° C
  - 35° C
  - 45° C

70. Which thermometer shows the boiling point of water?



71. What is the perimeter of the above rectangle?
- 18 cm
  - 30 cm
  - 36 cm
72. What is the area of the above rectangle?
- 36 square cm
  - 72 square cm
  - 36 square cm
  - 18 cm
73. Draw a rectangle with one side 1 inch and the other side of 3 inches. Then find the perimeter of the rectangle.
- 3 inches
  - 4 inches
  - 6 inches
  - 8 inches

74. Find the difference: Remember “bottom bigger better borrow” For example:  $52 - 16$ , the 2 is bigger than the 6, so you need to borrow from the 5 (tens).

$$\begin{array}{r} 28 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ - 19 \\ \hline \end{array}$$

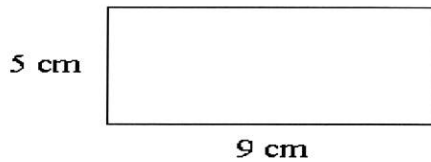
$$\begin{array}{r} 75 \\ - 37 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ - 14 \\ \hline \end{array}$$

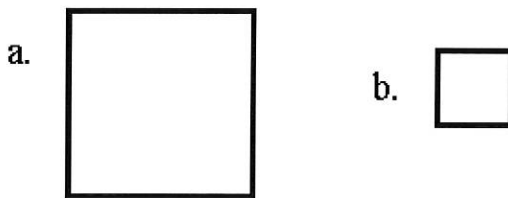
$$\begin{array}{r} 41 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 69 \\ - 5 \\ \hline \end{array}$$

75. What is the area of this rectangle?



- A. 14 cm  
 B. 14 cm<sup>2</sup>  
 C. 45 cm  
 D. 45 cm<sup>2</sup>
76. Which of these squares is closer to 1 square centimeter? A or B

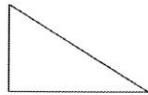


77. Victor told his friend Kyle that his family moved to Michigan three years and two months ago. Kyle said his family has been living in Michigan for eight years and seven months. How much longer has Kyle’s family been living in Michigan than Victor’s family?  
 A. 5 years and 5 months  
 B. 8 years and 7 months  
 C. 11 years and 9 months
78. Brian’s dad gave him a board that was four feet long and asked Brian to cut off six inches. How long should the board be when Brian finishes cutting it?  
 A. 30 inches  
 B. 42 inches  
 C. 48 inches
79. In gym, Joe jumped 3 feet 4 inches in the long jump. Bob jumped 4 feet 6 inches. How much longer was Bob’s jump than Joe’s jump?  
 A. 1 foot 2 inches  
 B. 2 feet 1 inch  
 C. 7 feet 10 inches
80. Mary worked on homework for 20 minutes on Tuesday. She worked on homework for 1 hour and 45 minutes on Wednesday. How much time did she spend doing homework all together on both days?  
 A. 2 hours  
 B. 2 hours and 5 minutes  
 C. 2 hours and 25 minutes

81. Jim's cat weighs 8 pounds 7 ounces. Betty's cat weighs 9 pounds 4 ounces. How much do the two cats weigh together?
- A. 18 pounds 11 ounces
  - B. 17 pounds 3 ounces
  - C. 17 pounds 11 ounces
  - D. 18 pounds 3 ounce
82. What is 2 minutes and 45 seconds plus 1 minute and 45 seconds?
- A. 3 minutes and 30 seconds
  - B. 4 minutes and 15 seconds
  - C. 4 minutes and 30 seconds
  - D. 4 minutes and 45 seconds
83. Victoria has 15 dollars and 67 cents. If she borrows 10 dollars and 58 cents from her dad, how much money will she have altogether?
- A. 25 dollars
  - B. 25 dollars and 25 cents
  - C. 26 dollars
  - D. 26 dollars and 25 cents
84. Andy had \$9.85. He bought a toy for \$5.52. How much money does Andy have left?
- A. \$3.24
  - B. \$4.33
  - C. \$5.43
  - D. \$15.37
85. Anna had \$2.25. She was given \$5.50 for her birthday. Anna then spent \$4.35 on a new book. How much Money does Anna have now?
- A. \$1.15
  - B. \$3.25
  - C. \$3.40
  - D. \$7.75
86. Lance has \$5.62. If he wants to buy a book that costs \$16.95, how much more money will Lance need?
- A. \$5.93
  - B. \$9.66
  - C. \$11.33
  - D. \$22.57
87. Write the following numbers in expanded notation. Ex.  $432 = 400 + 30 + 2$
- 3,402 = \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_
- 5,325 = \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_



88. Sally is 5 years and 5 months old. Her brother, Kevin, is 8 years and 6 months old. How much older is Kevin than Sally?
- A. 2 years and 1 month
  - B. 2 years and 11 months
  - C. 3 years and 1 month
  - D. 3 years and 11 months
89. Stan wants to buy enough paint to cover an area of one wall of his bedroom. The wall is 8 feet high and 10 feet wide. How many square feet will the paint need to cover?
- A. 18 square feet
  - B. 36 square feet
  - C. 80 square feet
  - D. 88 square feet
90. Which figure has four sides? (You can look the terms up in a dictionary.)
- A. Trapezoid
  - B. Circle
  - C. Triangle
  - D. Pentagon
91. How many right triangles would it take to make a square? Answer the question below, then show your answer by making a drawing.



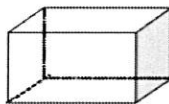
- A. 2
- B. 3
- C. 4
- D. 6

92. How many triangles would it take to make this hexagon?



- A. 2
- B. 3
- C. 4
- D. 6

- 93.



How many vertices are on the cube?

- A. 6 vertices
- B. 8 vertices
- C. 12 vertices

How many edges are on the cube?

- A. 6 edges
- B. 8 edges
- C. 12 edges

How many faces are on the cube?

- A. 4 faces
- B. 6 faces
- C. 8 faces

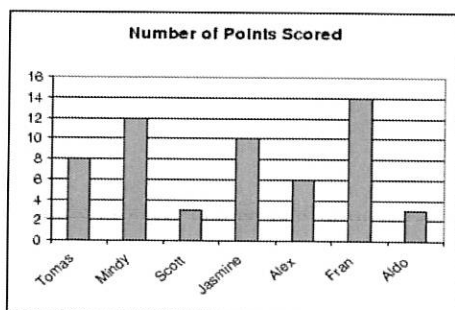
94. The shape of an orange is similar to a \_\_\_\_\_.

- A. cone
- B. cube
- C. prism
- D. sphere

95. What figure has four triangular faces and one square face?

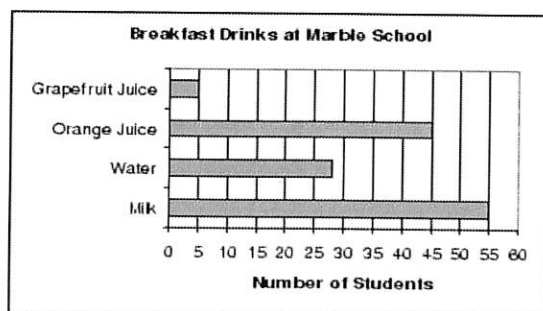
- A. Square prism
- B. Triangular prism
- C. Triangular pyramid
- D. Square pyramid

96. This chart shows how many points were scored by members of a basketball team. How many players scored 10 or more points?



- A. 1
- B. 2
- C. 3
- D. 4

97. 133 fourth grade students were asked what they drink with breakfast in the morning. Here is a bar graph of their responses.



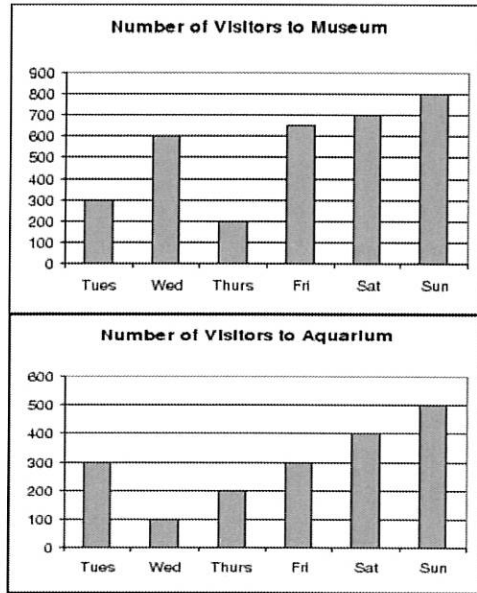
What is the range of this data?

- A. 28
- B. 50
- C. 55
- D. 60

What is the mean of this data? You can use a calculator for this.

- A. About 133
- B. About 33
- C. About 28

98. Did the museum or the aquarium have more visitors for the week?



- A. Aquarium
- B. Museum
- C. They are the same.
- D. There is not enough information to decide.

99. Solve each of these without using a calculator:

$4 \times 6 = \underline{\hspace{2cm}}$

$8 \times 8 = \underline{\hspace{2cm}}$

$2 \times 7 = \underline{\hspace{2cm}}$

$2 \times 9 = \underline{\hspace{2cm}}$

$5 \times 5 = \underline{\hspace{2cm}}$

$9 \times 6 = \underline{\hspace{2cm}}$

$8 \times 5 = \underline{\hspace{2cm}}$

$2 \times 2 = \underline{\hspace{2cm}}$

$3 \times 4 = \underline{\hspace{2cm}}$

$32 \div 4 = \underline{\hspace{2cm}}$

$7 \times 7 = \underline{\hspace{2cm}}$

$56 \div 7 = \underline{\hspace{2cm}}$

$72 \div 9 = \underline{\hspace{2cm}}$

$18 \div 2 = \underline{\hspace{2cm}}$

$3 \times 8 = \underline{\hspace{2cm}}$

$45 \div 9 = \underline{\hspace{2cm}}$

$4 \times 4 = \underline{\hspace{2cm}}$

$8 \times 7 = \underline{\hspace{2cm}}$

$24 \div 3 = \underline{\hspace{2cm}}$

$3 \times 3 = \underline{\hspace{2cm}}$

$3 \times 8 = \underline{\hspace{2cm}}$

$4 \times 6 = \underline{\hspace{2cm}}$

$6 \times 6 = \underline{\hspace{2cm}}$

$1 \times 9 = \underline{\hspace{2cm}}$

100. What is  $500 \times 8$ ? Explain how you figured this out, without using a calculator.