# Summer Math Packet
# For Students Entering Grade 3

A  B  C  D

20  30  40  50  60
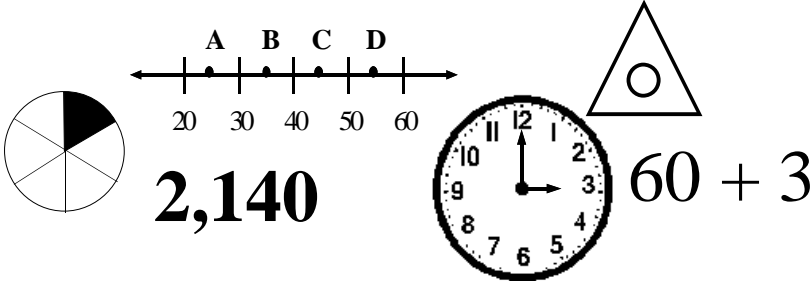
**2,140**

60 + 3

Student's Name _____

June 2012

**Record your answers in this packet.**

1.) Which means the same as 63?

    a) 60 + 3
    b) 9 + 3
    c) 6 + 30
    d) 6 + 3

2.) Which means the same as 15 ?

    a) 1 + 50
    b) 10 + 5
    c) 6 + 50
    d) 1 + 5
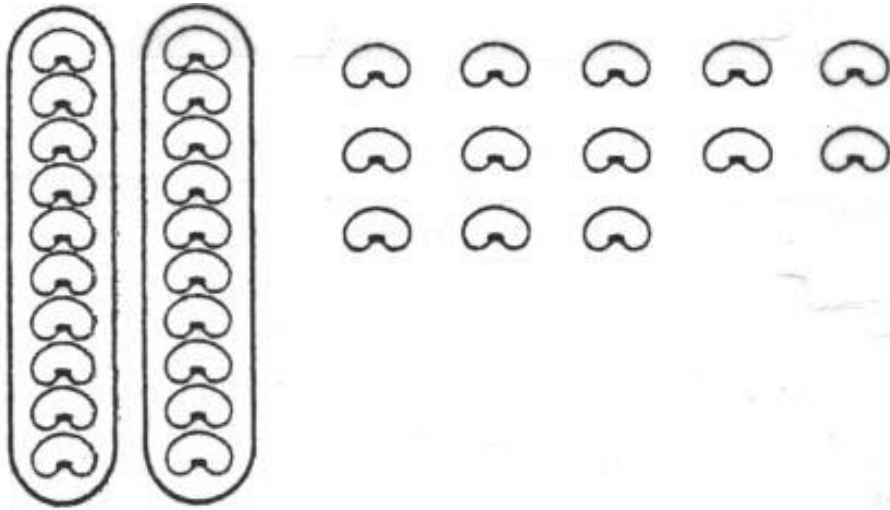
3.) Which means the same as 50 + 9 ?

    a) 590
    b) 509
    c) 95
    d) 59

4.) Which means the same as 30 + 6?
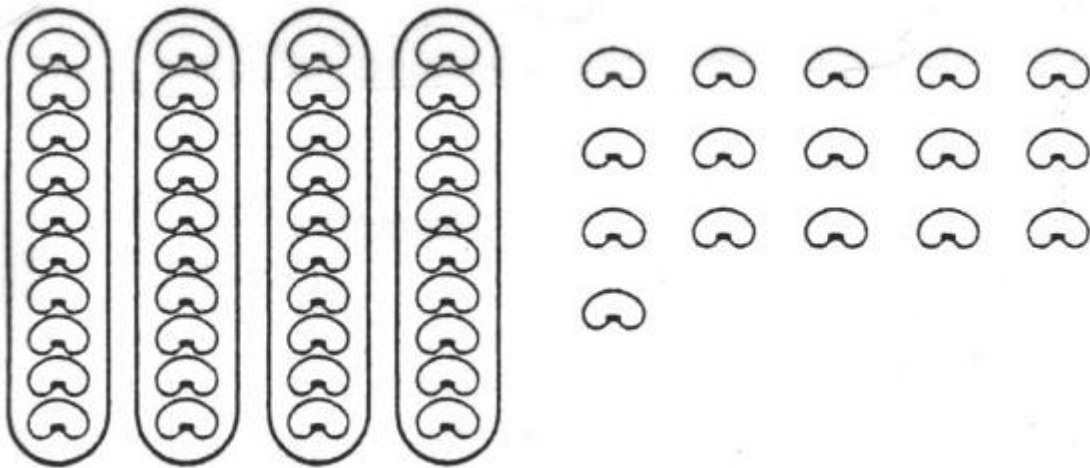
    a) 36
    b) 63
    c) 306
    d) 360

5.) What number means the same as what is shown in the picture?
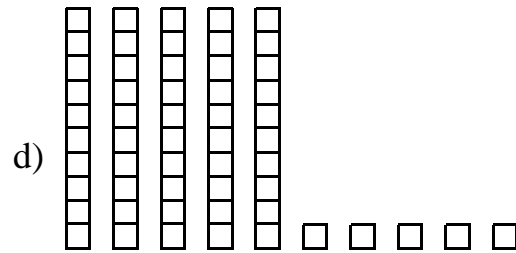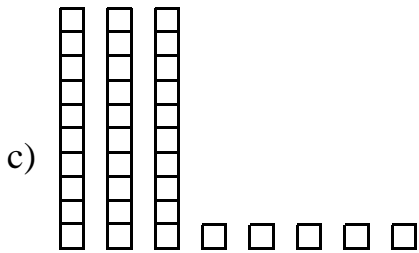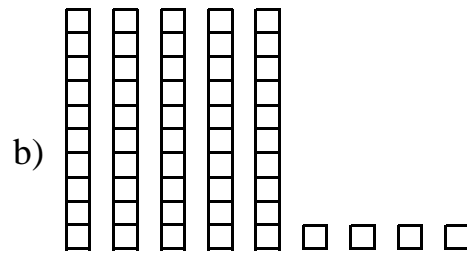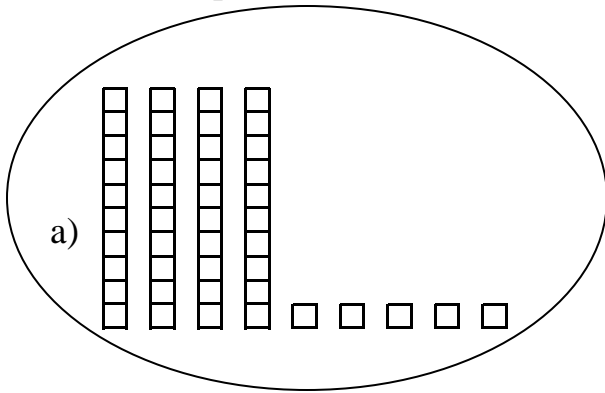
a) 15
b) 33
c) 45
d) 70

6.) What number means the same as what is shown in the picture?

a) 20
b) 44
c) 54
d) 56

7.) Which picture shows the number 45 ?

a)

b)

c)

d)

8.) Which picture shows the number 71 ?

a)

b)

c)

d)
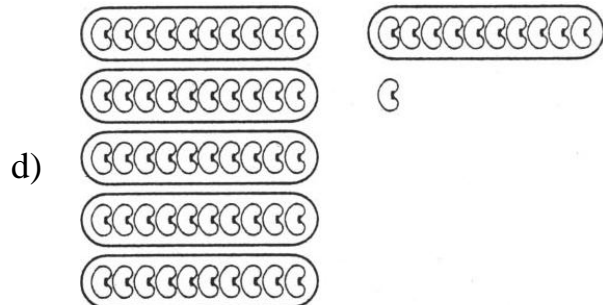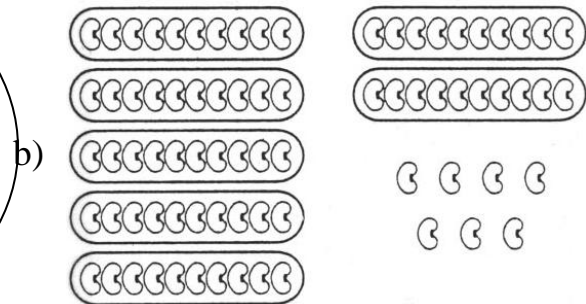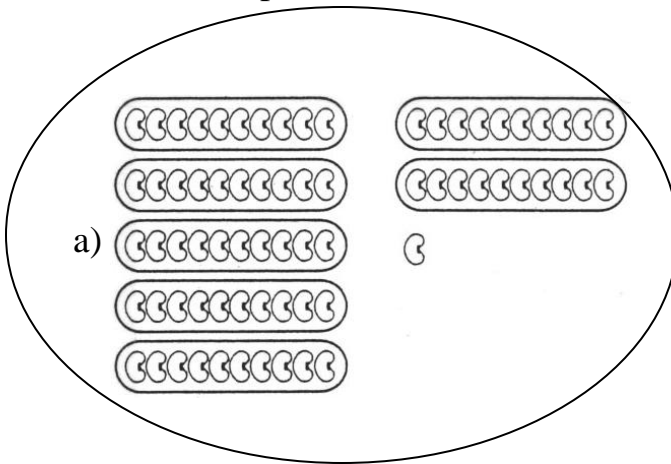
9.) In which number does the  5  have the **GREATEST** value?

    a)  645
    b)  563
    c)  59
    d)  5

10.) In which number does the  2  have the **GREATEST** value?

    a)  928
    b)  652
    c)  206
    d)  27

11.) In which number does the  2  have the **LEAST** value?

    a)  2,140
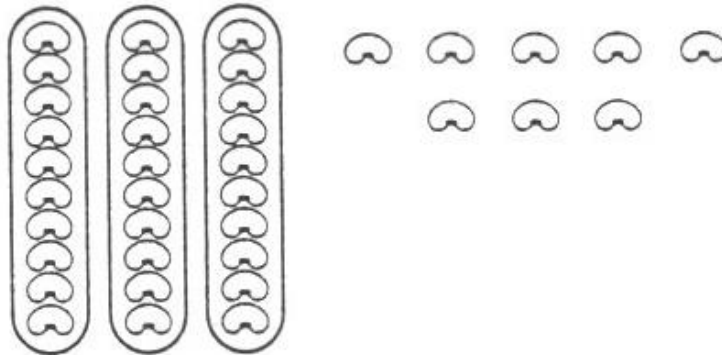    b)  432
    c)  261
    d)  29

12.) In which number does the 6  have the **LEAST** value?

    a)  688
    b)  460
    c)  165
    d)  56

# Pictorial Representation of Numbers

13.) What number does the picture show?

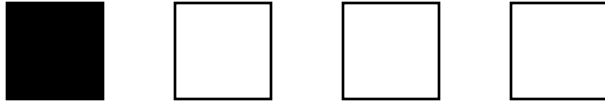a) 11
b) 35
c) 38
d) 83

14.) What number does the picture show?
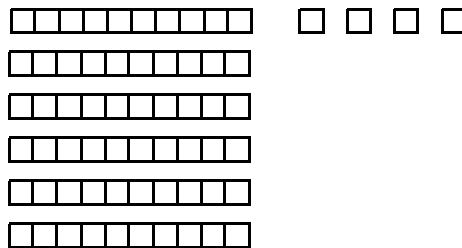
a) 10
b) 46
c) 54
d) 64

15.) Shade in $\frac{3}{4}$ of the box..  **Any 3 parts shaded in is correct**
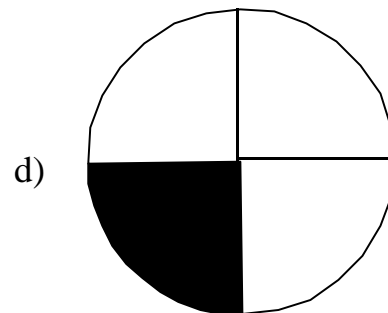
16.) What fraction of the group of squares is shaded?
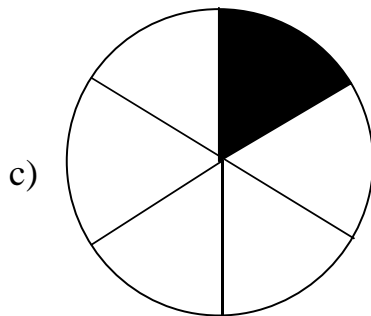


a) $\frac{1}{2}$

b) $\frac{1}{3}$

c) $\frac{1}{4}$

d) $\frac{3}{4}$

17.) In which picture is $\frac{1}{3}$ of the circle shaded?

a) 

b) 

c) 

d)
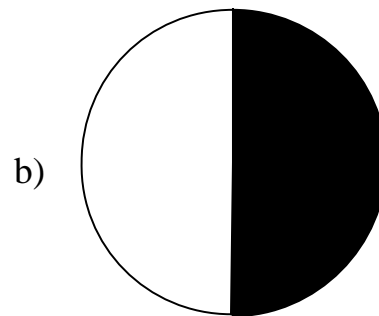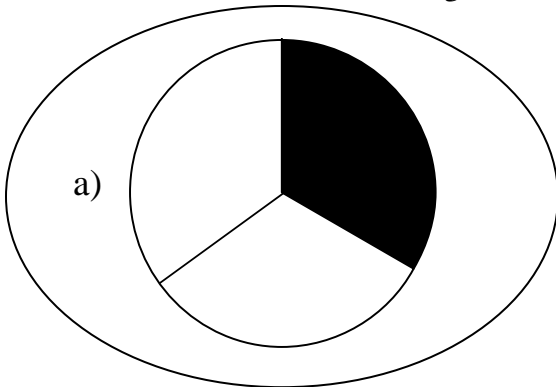
## Order, Magnitude, and Rounding of Numbers

18.) Which number is **LESS** than each of the following numbers?

| 54 | 46 | 52 | 48 |

a) 44
b) 50
c) 52
d) 49

19.) Which number is **GREATER** than each of the following numbers?

| 71 | 47 | 55 | 69 |

a) 78
b) 58
c) 70
d) 49

20.) Which number is **GREATER** than each of the following numbers?

| 16 | 31 | 28 | 43 |

a) 15
b) 55
c) 37
d) 40

21.) Which list shows the numbers in order from **LEAST** to **GREATEST**?

a) 46, 63, 64, 36
b) 57, 53, 75, 65
c) 32, 33, 35, 53
d) 78, 87, 77, 88

22.) Which list shows the numbers in order from **LEAST** to **GREATEST**?

    a) 66, 96, 78, 59
    b) 59, 81, 98, 88
    c) 27, 31, 37, 42
    d) 79, 97, 86, 68


23.) Which list shows the numbers in order from **GREATEST to LEAST**?

    a) 26, 14, 87, 10
    b) 87, 26, 20, 15
    c) 20, 15, 62, 87
    d) 14, 74, 87, 20


24.) What number is 1 **MORE** than 57 ?

    a) 10
    b) 38
    c) 58
    d) 60


25.) What number is 1 **LESS** than 89 ?

    a) 58
    b) 68
    c) 78
    d) 88


26.) What number is 2 **LESS** than 18 ?

    a) 15
    b) 16
    c) 20
    d) 22

27.) Chris has 14 stamps.  He has 2 letters to mail.  He used 1 stamp on each letter.  How many stamps does Chris have left?

    a)  16
    b)  14
    c)  13
    d)  12

28.) Connie has 12 video games.  This number is **CLOSEST** to:

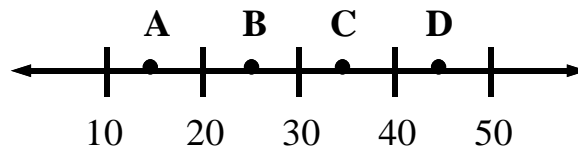    a)  10
    b)  15
    c)  20
    d)  25

29.) There are 23 children on a field trip.  This number is **CLOSEST** to:

    a)  15
    b)  20
    c)  25
    d)  30

30.) In the barnyard there are 38 chickens.  This number is **CLOSEST** to:
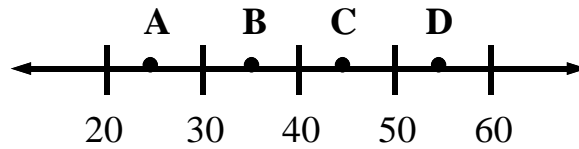
    a)  25
    b)  30
    c)  35
    d)  40

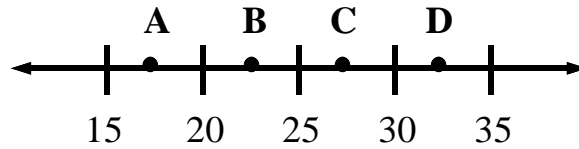31.) The number  36  would be **CLOSEST** to which point on the number line below?

                            **A**   **B**   **C**   **D**

                     10    20   30   40   50

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

32.) The number 23 would be **CLOSEST** to which point on the number line below?

A    B    C    D

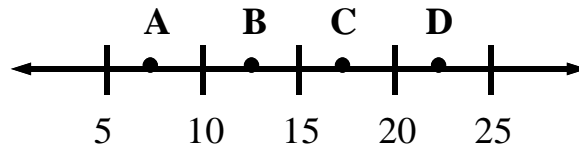20    30    40    50    60

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

33.) The number 16 would be **CLOSEST** to which point on the number line below?

A    B    C    D

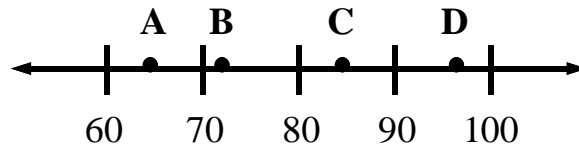15    20    25    30    35

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

34.) The number 21 would be **CLOSEST** to which point on the number line below?

A    B    C    D

5    10    15    20    25
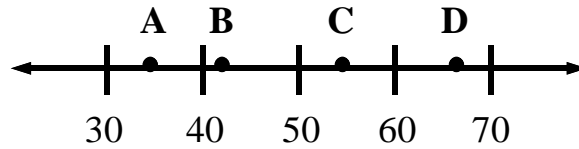
a) A
b) B
c) C
d) D

35.) On the number line below, the number 72 is **CLOSEST** to which labeled point?



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

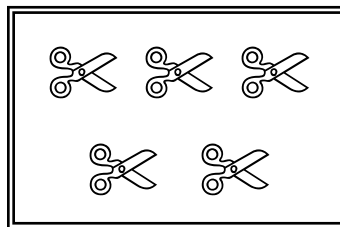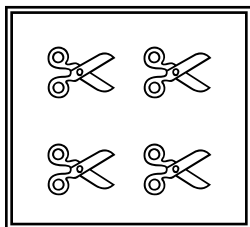36.) On the number line below, the number 56 is **CLOSEST** to which labeled point?



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

37.) There are two boxes of scissors.  Which number sentence tells how many scissors there are in all?
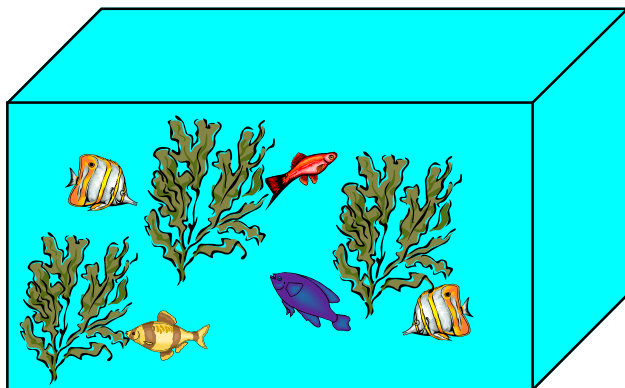


   a) $5 - 4 = \square$

   b) $5 - \square = 4$

   c) $4 + 5 = \square$

   d) $9 + 5 = \square$

38.) Which number sentence tells how many fish there are in all?



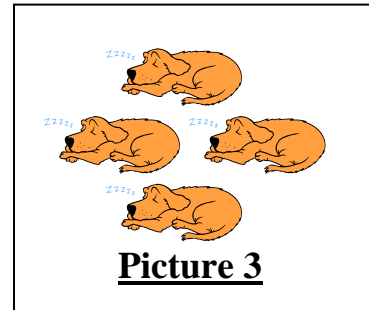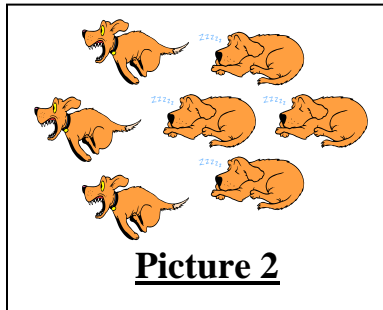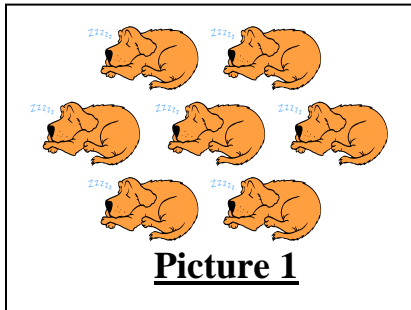   a) $\square - 5 = 7$

   b) $5 + 2 = \square$

   c) $2 + \square = 5$

   d) $7 - \square = 2$

39.) Sally drew three pictures as part of a story she is writing. Picture 1 shows 7 dogs sleeping. Picture 2 shows some of the dogs running away. Picture 3 shows the number of dogs left.
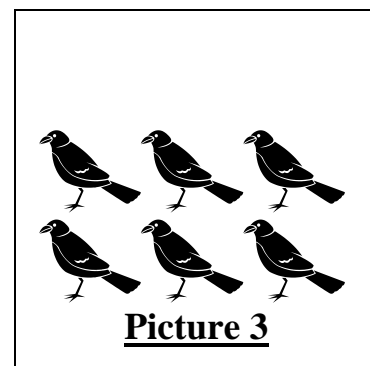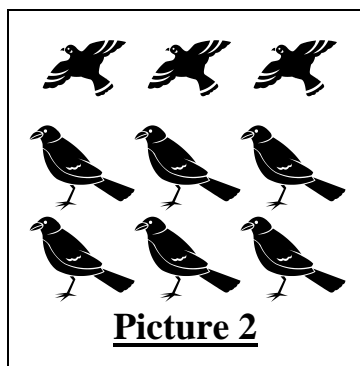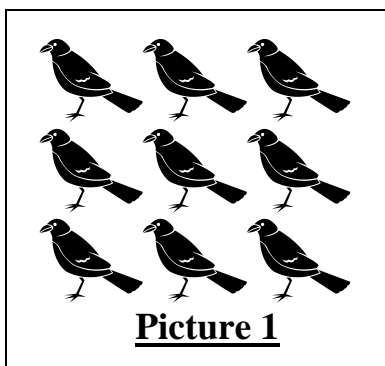
**Sally's Pictures**



Which number sentence best represents Sally's pictures?

   a) $3 + 4 = 7$
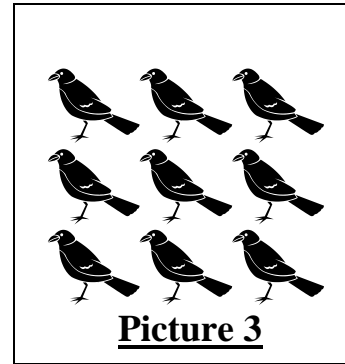   b) $4 + 3 = 7$
   c) $7 - 4 = 3$
   d) $7 - 3 = 4$

40.) The three pictures below are part of a story that Stacey is reading.



Which number sentence best represents the three pictures?

   a) $6 - 3 = 3$
   b) $9 + 6 = 15$
   c) $9 - 3 = 6$
   d) $9 + 3 = 15$

41.) Martina drew three pictures as part of a story she is writing.



**Picture 1**          **Picture 2**          **Picture 3**
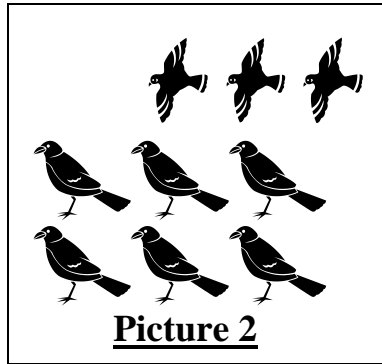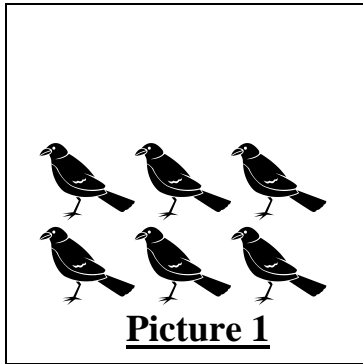
Which number sentence best represents the three pictures?

a) $6 + 3 = 9$
b) $9 + 6 = 15$
c) $9 - 3 = 6$
d) $9 + 3 = 12$

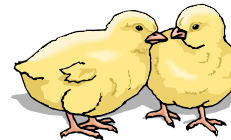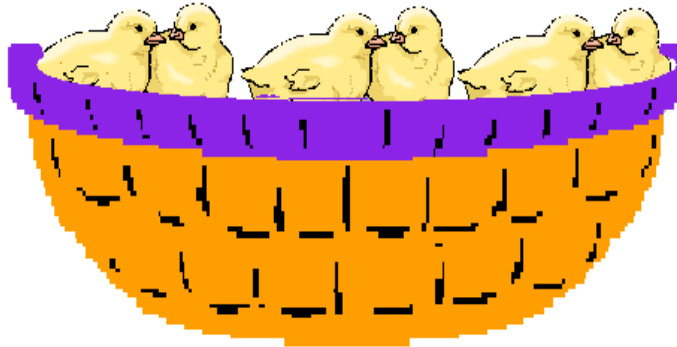42.) There were 8 chicks in the basket. Which number sentence shows how many chicks are still in the basket?



a) $6 - \square = 2$
b) $8 + 2 = \square$
c) $8 - 2 = \square$
d) $6 - 2 = \square$

43.) Rudy had 6 nickels in his bank. He spent 3 of them. Which number sentence could be used to find out how many nickels Rudy has left?

  a) $6 + 3 = \square$

  b) $6 - 3 = \square$

  c) $3 - 6 = \square$

  d) $\square - 6 = 3$

44.) Arthur collected 12 stamps. He gave 5 to Kevin. Which number sentence could be used to find out how many stamps Arthur had left?

  a) $12 + 5 = \square$

  b) $12 - 5 = \square$

  c) $12 + 7 = \square$

  d) $7 - 12 = \square$

45.) There are 20 students in Mr. Hitzfield's class and 15 students in Mrs. Horton's class. Which number sentence could be used to find out how many students are in both classes?

  a) $15 - \square = 20$

  b) $\square - 20 = 15$

  c) $20 - 15 = \square$

  d) $20 + 15 = \square$

46.) Last week 15 people bought bicycles. This week 12 people bought bicycles. Which number sentence could be used to find out how many people bought bicycles in two weeks?

  a) $12 + \square = 15$

  b) $15 - 12 = \square$

  c) $15 + 12 = \square$

  d) $15 - \square = 12$

47.) Write a story problem that can be solved using the number sentence

$$8 + 4 = \square .$$

The student writes a story problem that matches a given number sentence.  Correct numbers used in the situation followed by a question with a "?".

_____

_____

_____

_____

_____

48.) Write a story problem that can be solved using the number sentence

$$12 - 5 = \square .$$

The student writes a story problem that matches a given number sentence.  Correct numbers used in the situation followed by a questions with a "?".

_____

_____

_____

_____

_____

## Basic Facts

49.) Use counters, if needed, to solve the problem: $9 + 2 =$

    a)  6
    b)  10
    c)  11
    d)  12

50.) Use counters, if needed, to solve the problem: $8 + 9 =$

    a)  3
    b)  5
    c)  15
    d)  17

51.) Use counters, if needed, to solve the problem: $12 - 9 =$

    a)  3
    b)  7
    c)  13
    d)  17

52.) Use counters, if needed, to solve the problem: $15 - 6 =$

    a)  9
    b)  10
    c)  11
    d)  12

53.) How many birds are left on the tree after several fly away?
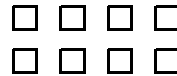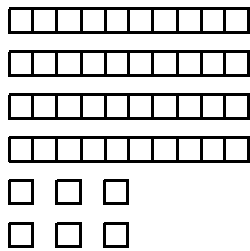
$14 - 6 = \square$

a) 3
b) 6
c) 8
d) 10

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**Computations with Whole Numbers and Decimals**

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54.) Use the materials shown to find $46 + 8$.
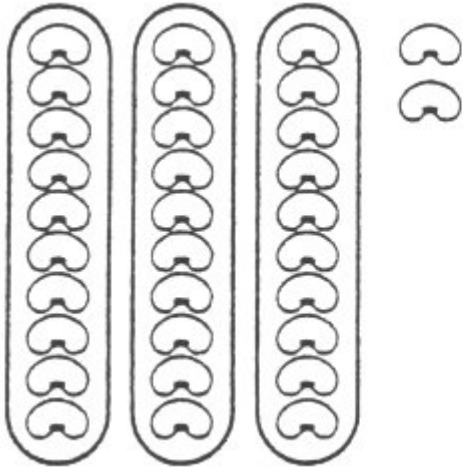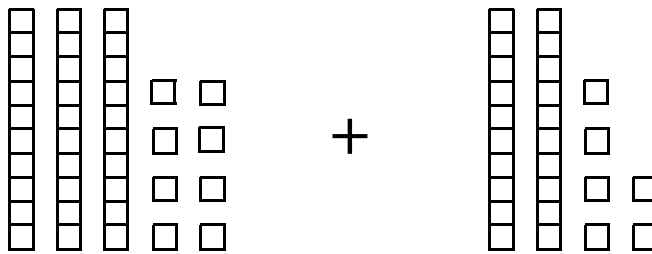
a) 64
b) 54
c) 44
d) 42

55.) Use the materials shown to find     32 + 6.



    a) 26
    b) 34
    c) 38
    d) 39

56.) What total number of blocks is represented by the sum below?



    a) 64
    b) 56
    c) 58
    d) 44

## Solve Word Problems

57.) Renee caught 3 fish in the morning.  Then she caught 8 fish in the afternoon.  How many fish did she catch altogether?  (Use counters if needed.)

    a)  5
    b)  9
    c)  10
    d)  11

58.) Christie collected 15 eggs.  Trent collected 7.  How many **MORE** eggs did Christie collect than Trent?  (Use counters if needed.)

    a)  7
    b)  8
    c)  9
    d)  25

59.) Keegan brings 28 cookies to school.  She gives 1 cookie to each of 9 friends.  How many cookies does Keegan have left?  (Use counters if needed.)

    a)  19
    b)  17
    c)  23
    d)  21

## Estimating Solutions to Problems

60.) Moriah's parents spent $53 at the grocery store.  **ABOUT** how much money is that?
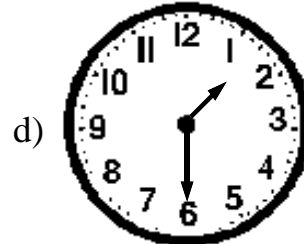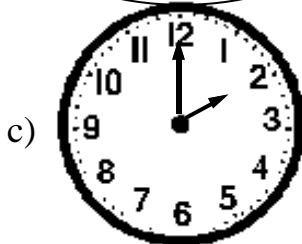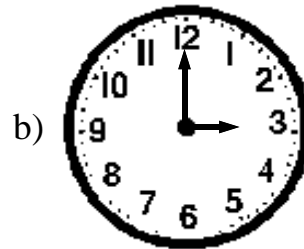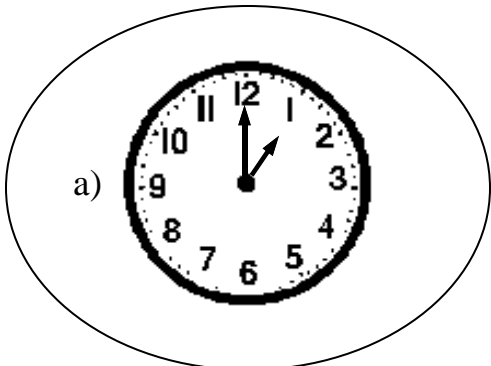
    a)  a little less than $40
    b)  a little more than $40
    c)  a little less than $50
    d)  a little more than $50

61.) Jeremy is 47 inches tall.  **ABOUT** how many inches is that?
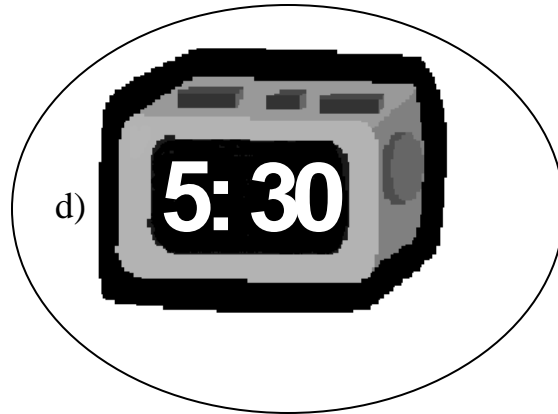
    a)  a little less than 40
    b)  a little more than 40
    c)  a little less than 50
    d)  a little more than 50

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**Time and Money**

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62.)  Which clock shows 1:00?

a) 

b) 

c) 

d)

63.) Which clock shows half-past 5 ?

a) 4:00

b) 4:30

c) 5:00

d) 5:30

64.) Isaac cannot see the clock.  Tell Isaac the time to the **NEAREST** half hour.

a)  about nine thirty
b)  about ten o'clock
c)  about ten thirty
d)  about eleven o'clock

65.) Carlos paid the following for a candy bar.



How much money did the candy bar cost?

a)  8¢
b)  32¢
c)  57¢
d)  62¢

66.) Aimee bought an ice cream cone with the following coins.



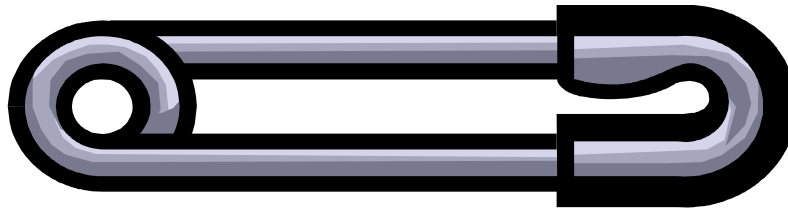How much money did Aimee spend?

a)  65¢
b)  75¢
c)  85¢
d)  95¢

## Approximating Measures

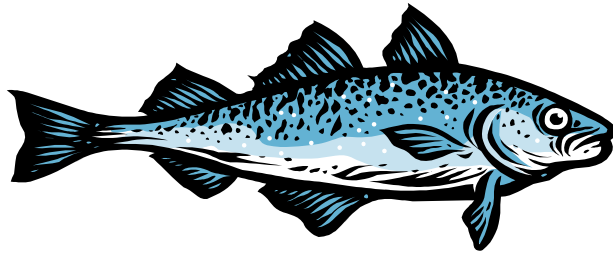67.) **ABOUT** how many grasshoppers will fit on the stick?

a) 2
b) 5
c) 8
d) 20

68.) **ABOUT** how many units long is the picture of the safety pin?

1 unit

a) 2
b) 4
c) 6
d) 8

69.) **ABOUT** how many units long is the picture of the fish?



_____
1 unit

    a)  2
    b)  3
    c)  6
    d)  8

70.) **ABOUT** how many dimes will fit in the rectangle?



    a)  1
    b)  2
    c)  4
    d)  8

71.) Leah places books side by side on a short shelf.  The books are all the same size.  One book is shown.  **ESTIMATE** the number of books that will fit on the shelf.

M
A
T
H

a) 5
b) 8
c) 12
d) 15

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**Customary and Metric Measures**

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72.) Use pennies to measure**:  Reasonable answers accepted**

a) the length of your pencil                    _____ pennies long

b) the length of your shoe                      _____ pennies long

c) the length of your kitchen table top on one side
                                                _____ pennies long

d) the length of your favorite story book  _____ pennies long

73.) Joe takes 12 giant steps to measure the length of his classroom. Next Joe measures the length taking small steps. Tell how the number of steps changes when Joe uses small steps.

Answers will vary, but should include the concept of the total number of steps increasing as Joe's steps get smaller.

74.) Which unit would be **BEST** to measure the length of a dinner fork?

    a) yards
    b) miles
    c) inches
    d) feet

75.) Which is a **REASONABLE** length for a baseball bat?

    a) 3 inches
    b) 3 feet
    c) 3 yards
    d) 3 miles

76.) Which is a **REASONABLE** length for a shoe?

    a) 25 liters
    b) 25 kilometers
    c) 25 centimeters
    d) 25 meters

77.) Suppose you measure the height of your teacher's desk. Which unit will you **MOST** likely use?

a) inches
b) miles
c) pounds
d) hours

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**Geometric Shapes and Properties**

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78.) Which figure is a triangle inside of a circle?

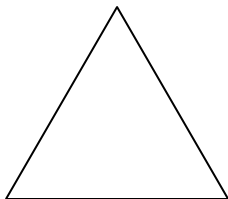a)    b)    c)    d) 
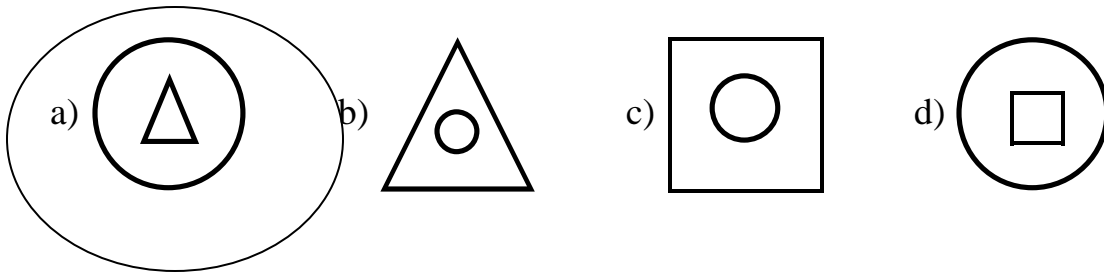
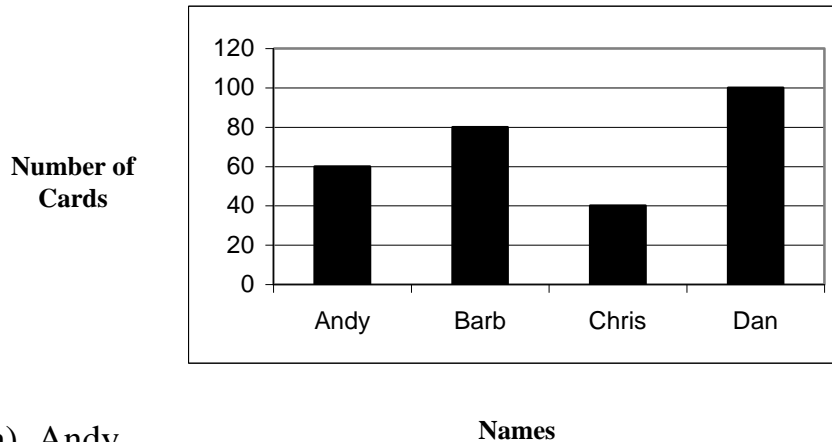79.) Draw a rectangle.          **Rectangles will vary.**
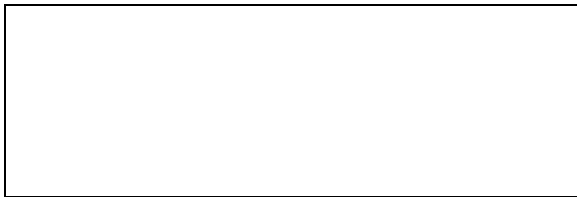
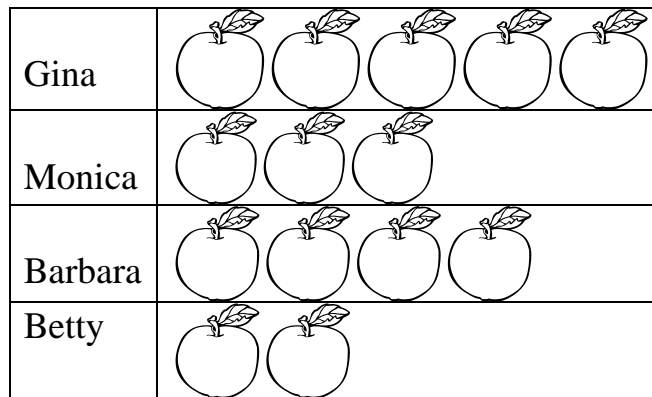80.) Draw a triangle.          **Triangles will vary**

# Tables, Graphs, and Charts

81.) Use the graph below to figure out who collected **MORE** than 80 baseball cards?

**Baseball Card Collections**



Number of Cards

Names

a) Andy
b) Barb
c) Chris
d) Dan

82.) Use the graph below to figure out how many apples the four girls picked altogether?



= 1 apple

a) 5
b) 12
c) 13
d) 14

83.) Complete the **BAR** graph using the following information.

**Family Pets**

| Pets | Number of Students |
|------|--------------------|
| Bird | 2 |
| Cat | 4 |
| Dog | 6 |
| Fish | 3 |

# Family Pets



Number of Students

Pets
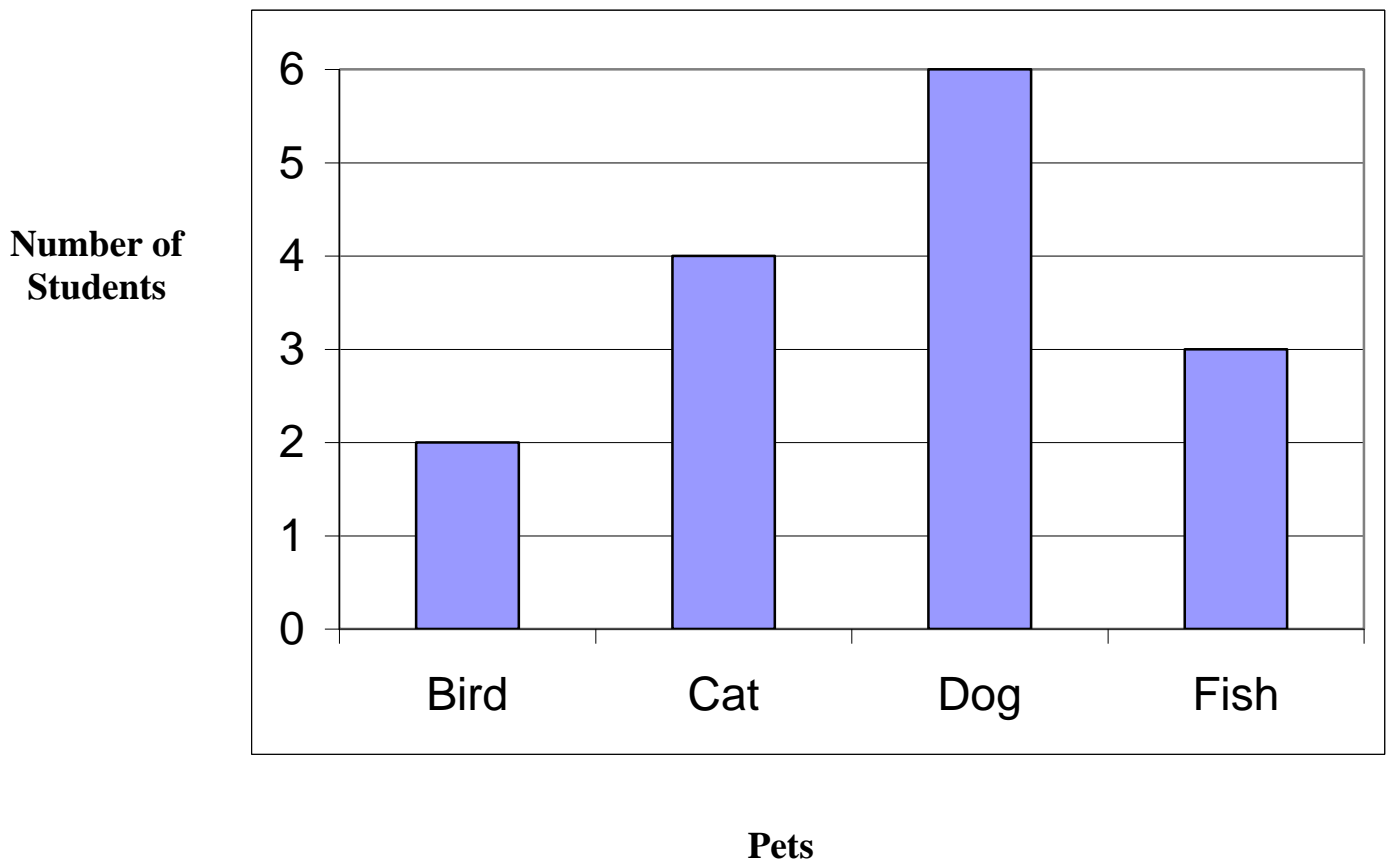
84.) Complete the **PICTOGRAPH** using the following information.

**Reading Progress**

| Student | Number of Books Read |
|---------|:---:|
| Alex | 6 |
| Dan | 3 |
| Kim | 5 |
| Len | 4 |

# Reading Progress

| Student | Number of Books Read |
|---------|----------------------|
| Alex | ☐ ☐ ☐ ☐ ☐ ☐ |
| Dan | ☐ ☐ ☐ |
| Kim | ☐ ☐ ☐ ☐ ☐ |
| Len | ☐ ☐ ☐ ☐ |

Use ☐ = 1 book

## Patterns

85.) What is the next number in the pattern?  Write the number.  Then write a sentence that explains why you wrote that number.
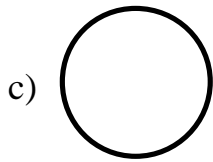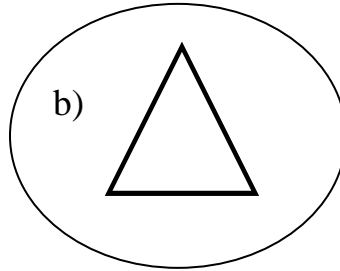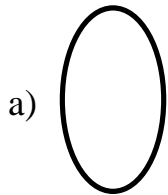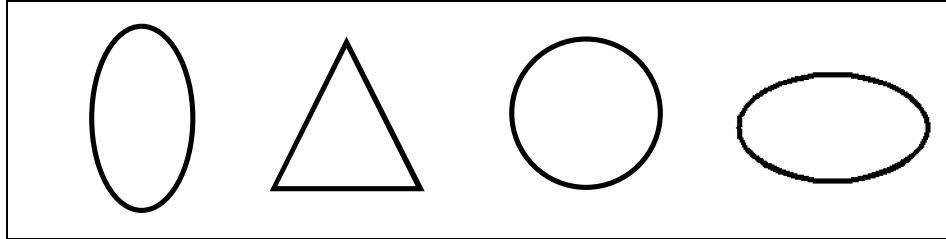
2,    4,    6,    8,    10,    12

The pattern is +2.

86.) What is the next shape in the pattern?

a)
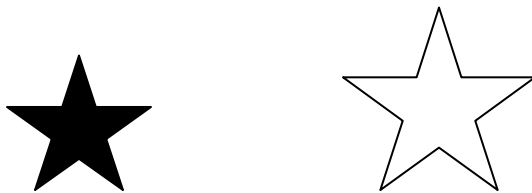
b)

c)

d)
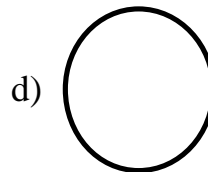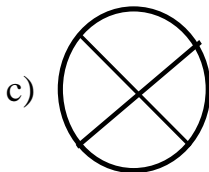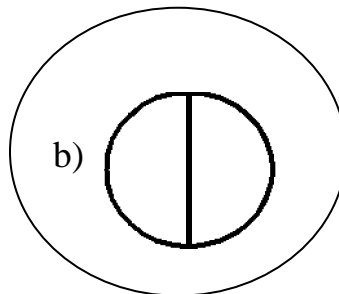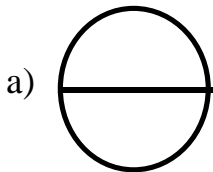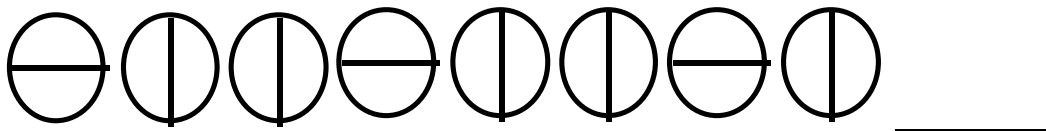
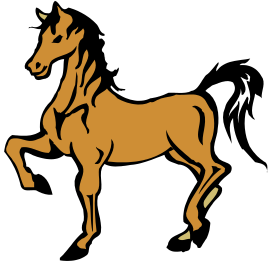87.) Which shape does **NOT** belong?

a)

b)

c)

d)

88.) Sandi bought these two stickers for her sister.

How are the stickers the **SAME**?

   a)  height
   b)  size
   c)  color
   d)  shape

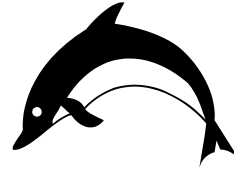89.) Sort these animals into 2 groups.  Write the sorting rule below.

horse          frog          snake          ant          fish          dolphin
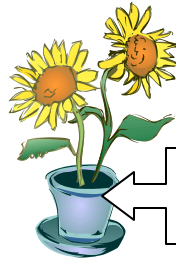
**GROUP 1**                              **GROUP 2**

_____          _____

_____          _____

_____          _____

_____          _____

_____          _____

**Sorting Rule**

_____

Answers will vary.  The sorting should be by one
attribute, i.e., "how they move" ⟶ 'animals that
walk';  'animals that don't walk'.

_____

## Mathematical Applications

90.) Jack spent $15 on flower plants.  He bought at least 1 of each kind.
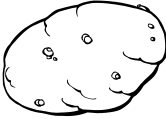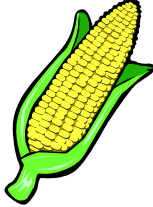Show 1 way Jack could have spent $15 on flowers.

$3.00

$4.00

$2.00

Show your work.

**Answers will vary.  One possible solution is below.**

|  | **How many flowers?** | **How much did they cost?** |
|---|---|---|
| $3.00 | 3 | $9.00 |
| $4.00 | 1 | $4.00 |
| $2.00 | 1 | $2.00 |
|  |  | **TOTAL COST** $15.00 |

91.) You are going to make "souper" summer soup for your family.  **<u>You have to use at least one of each type of vegetable to make your soup.</u>** Write how many of each you use on the line under the vegetable.   You must choose 12 vegetables.

corn

potato                  onion                                       tomato

_____        _____        _____        _____

**Show your work.**

> **There are many solutions.  The student must have:**
>
> ● **at least 1 of each vegetable; and**
>
> ● **a total of 12 vegetables.**