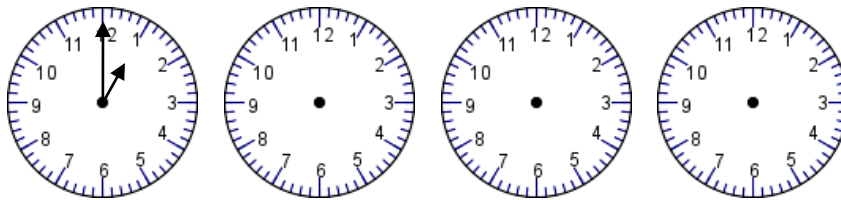**Smiley Face Math**
Grade 2, Worksheet I

Name_____

☺   1. Complete the two patterns.

448, 458, 468, _____, _____, 498, _____, 518

285, 385, 485, 585, _____, _____, _____, _____,1085

☺ ☺   2. Jackson ate a cookie at 1:00. He ate another cookie every 2½ hours. Draw the hands to show when Jackson ate his four cookies. The 1:00 cookie is done for you.

☺ ☺ ☺ 3. Mario looked at his sister's tricycle and counted 3 wheels.

If his sister had 5 friends over to play, and each brought her tricycle, how many wheels would there be?
                    Answer: _____

☺ ☺ ☺   4. Destiny saved 3 quarters, 3 nickels, and 10 pennies each week from her allowance.
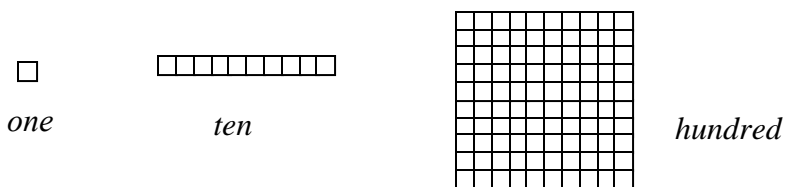
How much money will she save in 1 week? _____

How much money will she have saved after six weeks? _____

Explain your thinking.

☺ ☺ ☺   5.   In each square, draw lines to show *fourths*. Draw three different ways to show *fourths*.

☺ ☺ ☺ ☺ 6. Shown below is a small square, then 10 small squares, then 100 small squares.

☐
one

▢▢▢▢▢▢▢▢▢▢
ten

hundred

a. How many *tens* are needed to make 100 small squares? _____

b. How many *hundreds* are needed to make 1,000 small squares?_____

c. How many *tens* are needed to make 1,000 small squares? _____

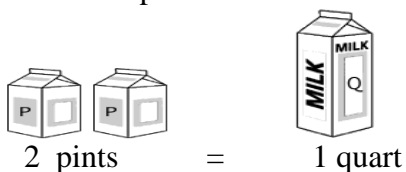d. How many *tens* are needed to make 2,000 small squares? _____

☺ ☺ 7. Estimate to the *nearest hundred*.

Jenny has 482 marbles, 216 stickers, and 91 shells.
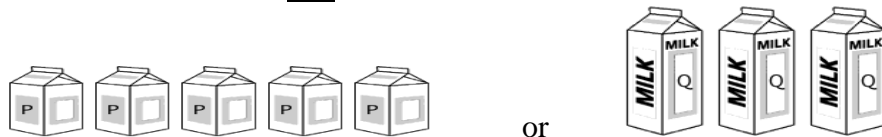*About how many items does Jenny have?*

About _____ items

Explain how you estimated:

☺ ☺ 8. Use the picture to help you solve the problem.

2 pints   =   1 quart

Circle the set which holds <u>less</u> milk.
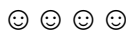
or

Explain how you know:

☺ ☺   1. Complete the number patterns. Circle if the pattern is increasing or decreasing and
        tell the amount.

        45, ____, 55, 60, ____, ____, 75   Increasing or Decreasing?   By how much? _____

        72, 62, ____, 42, ____, ____, 12   Increasing or decreasing?   By how much? _____

☺ ☺ ☺ ☺ 2. Tell what numbers to use for ?, so both sides of the scale will balance.

        a. $7 + 8$ $? + 6$ $? = $ ____

        b. $9 - 4$ $7 - ?$ $? = $ ____

☺ ☺ ☺ 3. Joshua has $21.00. A small pizza costs $4.00 and a six pack of soda costs $2.00.
        He wants to buy 3 pizzas and 2 six packs of soda. Does he have enough money? _____

        $4.00 $2.00   Explain your answer:

☺☺☺ 4. I am thinking of two numbers.
              Their sum is 15.
              One number is 9 more than the other.
        What are the two numbers?   Answer: _____ and _____

☺☺☺☺ 5. Hollis wants to put one sticker on each of her baby doll's hands.
          She made a chart to keep up with how many stickers she will need for the dolls.

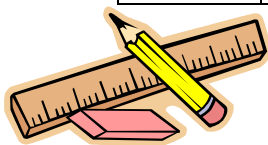| Number of dolls	Number of hands
1	2
2	4
3	
4	
5	

a. Finish Hollis' chart for 3, 4, and 5 dolls.

b. How many stickers does she need for

     her 5 dolls?_____

c. Explain how many stickers Hollis needs

     for any number of dolls she might have:

☺☺   6. Complete the pattern. One yard equals 3 feet and two yards equal 6 feet.

yards	1	2	3	4	5	6
feet	3	6	___	___	___	___

☺☺☺☺ 7. Compare. Write >, <, or = between each pair of numbers. Think of > and < as
          being an open alligator mouth. The gator always wants to eat a number bigger than he is.
          So his mouth opens toward the bigger number. If the numbers are equal, use =.

a.   882 ☐ 881   b. 327 ☐ 327
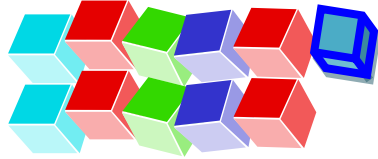
c.   310 ☐ 301   d. 123 ☐ 132

☺   1. Is 11 an *even number* or an *odd number*? _____   How do you know?
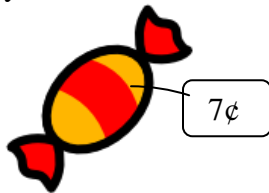
☺ ☺   2. Victor earns 5 minutes of center time each day he turns in his homework to his teacher. How much free time will he have earned if he turns in his homework for 11 days?

Answer: _____ minutes

☺ ☺ ☺   3. Each piece of candy costs 7 cents. Cori has 50 cents. How many pieces of candy might Cori buy?

7¢

Answer: Cori might buy _____ pieces of candy.

☺ ☺ ☺   4. Alex has $2.50. He wants to buy one of each of the toys.

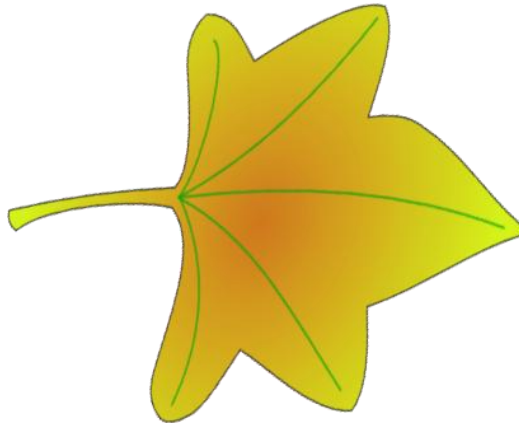Does he have enough money? _____
How do you know?

$0.65 $1.15 $ 0.40

☺ ☺   5. Add 48 + 33.   **48**
                                                             +33
                                                             ┌──────┐
                                                             │   │
                                                             └──────┘

        How can you use subtraction to check your work?

☺ ☺ ☺   6.   a. Measure the length of the leaf to the nearest inch.   _____ inches

                  b. Measure the length of the leaf to the nearest centimeter. _____ centimeters

                  c. Explain why part (a) has a smaller number than part (b):

☺ ☺   7. Janet's aquarium is the shape of a *rectangular prism*. It has a glass top.

                  How many *faces* does it have? _____
                  How many *edges* does it have? _____
                  How many *vertices* does it have? _____

☺ ☺ ☺   8. Janet's aquarium holds 40 liters of water. How many times would you have to pour a
            2-liter bottle of water into Janet's empty aquarium, to totally fill it?

                                                        Answer: _____ times

☺   1. Tell in your own words how to make this pattern:

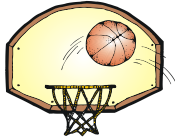▲▲►▼▲▲►▼▲▲►▼▲▲►▼ ....

Answer: You make the pattern this way:

☺☺☺ 2. What time will show on the clock in four hours?_____   In 10 hours? _____

☺☺☺ 3.   Bella earns a quarter for making her bed every day.
At the end of one week, how much money does Bella have? _____

☺   4.   Billy made seventeen baskets in his last game. Danny made fourteen baskets. Who
made more baskets, Billy or Danny?   _____   How many more baskets? _____

☺   5. Remember the alligator mouth! Show the bigger number of baskets by writing > or < in
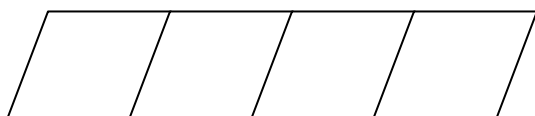the box.

17 ☐ 14

☺ ☺   6. How many sides do the four rhombi have altogether?

Answer: _____ sides

☺ ☺ ☺   7. If the four rhombi above were pushed together, the figure might look like:

How many sides does the new figure have? (The sides are the *outside* edges.)

Answer: _____ sides

☺ ☺ ☺   8. If each edge of the rhombus is 2 inches long, what is the *perimeter* of the shape above?   Remember the *perimeter* is the length around the outside edge.
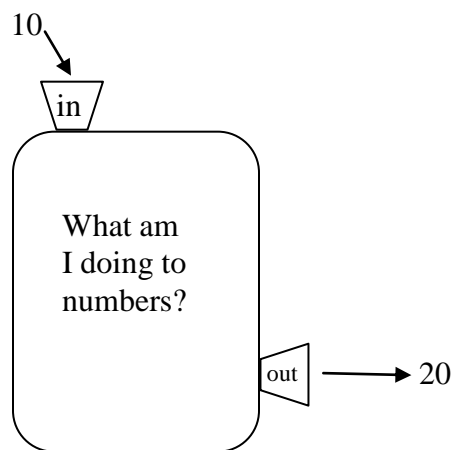
Answer: The perimeter is _____ inches.

☺ ☺ ☺   9. Study the "in and out" table. Find and tell the rule of how to start with an *in* number, and get the *out* number

What is the rule? _____

Use the rule to complete the table.

IN	OUT
10	20
5	15
7	17
1	11
14	
8	
55	

10

in

What am I doing to numbers?

out → 20

☺☺   1.   Marcus wants to build a rectangular fence for his dog Marley. Two sides will be 20
        feet long and two sides will be 15 feet long. How many feet of fence does he need to
        buy?

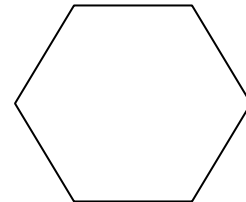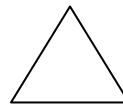   Answer: He needs to buy ___ feet of fence.

☺☺☺   2.   Marcus wants to put a pole every 5 feet to hold up the fence. How many poles does
        he need to buy?

                                            Answer: He needs to buy ___ poles.

☺☺   3. How many triangles like the one below fit into the hexagon? _____   What fraction of
        the hexagon is the triangle?
                                    Answer: ____

☺☺   4. Think about the second row of numbers in the chart. What are the 7th and 8th numbers
        in the second row?
                                Answer: ____ and ____

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
12	15	18	21	24	27	?	?	36	39

        Tell in words how you know:

☺☺   5.   Al has 642 baseball cards. His brother Toby has 128 less than Al.
            How many baseball cards does Toby have?

                                        _____ baseball cards

☺☺   6.   Chelsea had two $1 bills and a quarter to spend at the candy store.
            Her sister Ashley had 8 quarters, 3 dimes, and a nickel.
            Which sister had more money to spend? _____   How much more? _____

       Chelsea-

       Ashley-

☺☺   7. There are 13 crayons in the package below. Is 13 an *even* or an *odd* number?
           Explain how you know.

                        Answer:

☺☺   8. Make a paper airplane. Throw it and measure how far it goes in inches.   Answer: ___ inches

           Throw it a second time and measure how far it goes this time.   Answer: ____ inches

           Which throw went the longest distance?_____
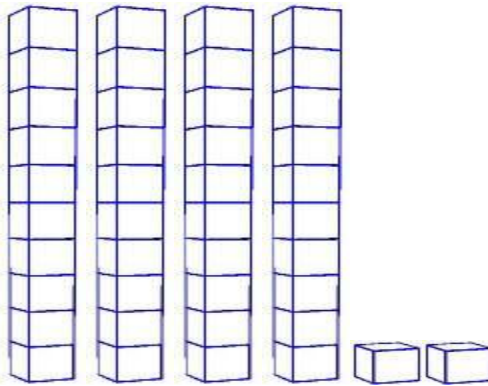
           How much longer was it? _____inches longer

☺ ☺ ☺   1. Each apple below weighs 12 ounces. Jorge made 4 bananas balance with 3 apples.
How much does each banana weigh?   _____ ounces

☺ ☺   2. What number is shown by the blocks below?   _____

How many blocks would there be if you
added 29 more blocks?

_____ blocks

How many blocks would be left if you
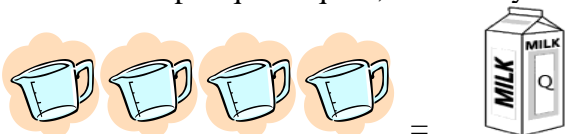removed 25 from the original group?

_____ blocks

☺ ☺   3.   Rose wants to measure her bedroom.   She can't decide between using a ruler or a
yardstick. Which tool would she have to put down more times, the ruler or the yardstick,
to measure the room?   _____

yardstick

ruler

Explain why:

☺ ☺ ☺ ☺ 4. If 4 cups equal a quart, how many cups are in 3 quarts?

=   so _____ cups = 3 quarts

☺ ☺ ☺   5. Draw and label 3 pencils, A, B, and C, so that:

        Pencil A is longer than pencil B, and
        Pencil B is longer than pencil C.

    Is pencil A longer or shorter than pencil C?

        Answer: _____

☺ ☺ ☺   6. Circle the unit of measure you would use to weigh a full back pack.

                               a. pounds   b. quarts

                               c. liters   d. meters

☺ ☺   7. Jonah had an ant farm with 234 ants.
       His little brother's ant farm had 169 ants.
       How many more ants did Jonah's ant farm have?

                                                 _____ants

☺ ☺ ☺   8. Without measuring, how tall do you *think* you are? Circle **3**, **4**, or **5** feet.

    a. After measuring yourself, about how tall are you?

                         Answer: I'm about _____ feet tall.

    b. Find one thing in your house taller than you. Estimate its height, using *your* height:

                         Answer: ___feet

    c. Find one thing in your house shorter than you. Estimate its height, using *your* height:

                         Answer: ___ feet

☺ ☺ ☺ ☺ 1. Use this hundreds chart.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17		19	20
21	22	23		25	26	27	28		30
31	32	33	34	35	36	37	38	39	40
41		43	44	45	46	47	48	49	50
51	52	53			56	57	58	59	60
61	62	63	64		66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86		88	89	90
91	92	93	94	95	96	97	98	99	100

a. Write in the missing numbers.

b. Skip count by 2s and color the numbers you counted light green.

c. Skip count by 5s and color the numbers you counted light red.

d. Draw a circle around any numbers that are colored both red and green.

☺ 2. Look at the numbers you colored light green in the hundreds chart above. These numbers are all *even* numbers. Numbers that are **not** colored light green are *odd* numbers.

How can you tell an *even* number by looking at the *ones* digit?

Answer: An *even* number ends in ____, ____, ____, ___, or ____.

How can you tell an *odd* number by looking at the *ones* digit?

Answer: An *odd* number ends in ____, ____, ____, ___, or ____.

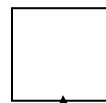☺ ☺ 3. Add the next five symbols to the pattern below:

Z, Y, 1, Z, Y, 2, Z, Y, 3, Z, ____, ____, ____, ____, ____

Explain how to make the pattern:

☺ ☺ 4. Kylie has six bags of marbles. There are five marbles in each bag.
How many marbles does Kylie have?   _____ marbles

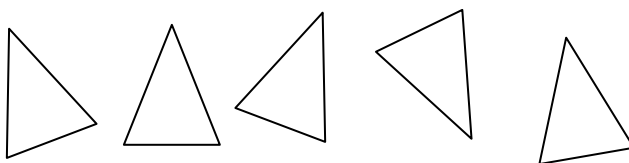☺ ☺ ☺ 5. Use one of these symbols to compare the value of these coins.

less than   <
greater than >
the same as =

Use the symbol here

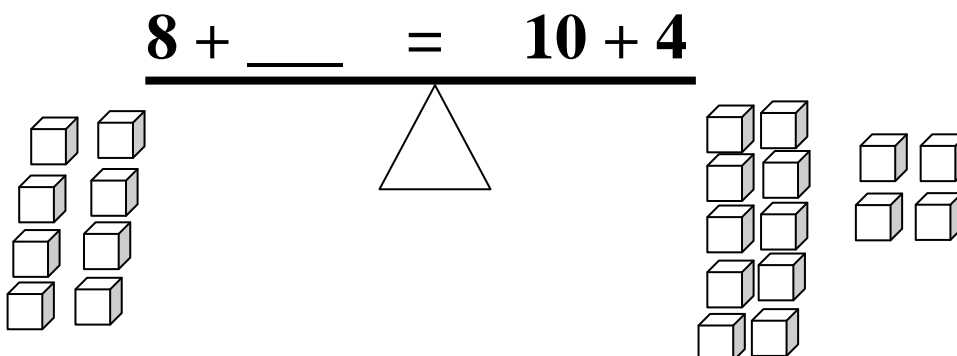☺   6. What is the total number of sides for five triangles? _____ sides

☺ ☺ ☺ 7. Look at the "input-output" table. What is the rule? Complete the table.

INPUT	OUTPUT
6	4
9	7
4	2
8	

Rule: For each input number, I

_____

to get the output number.

☺   8. Rita put 14 blocks on the right side of a balance scale. She put 8 blocks on the left side. Help her add enough blocks to make both sides equal.

$$8 + \underline{\quad} = 10 + 4$$

Smiley Face Math   **Name:** _____
Grade 2, Worksheet VIII

☺   1.   The baseball team has shirts with these numbers: **36, 19, 45, and 32.** Write the
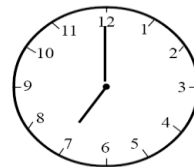   numbers **on** the shirts from **least to the greatest**.

least
number   greatest
                                                                                  number
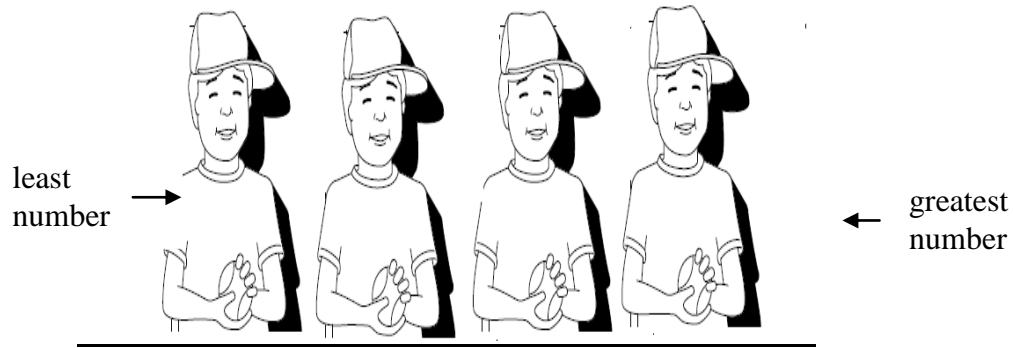
☺ ☺   2.   John wanted to buy a toy that cost $0.68. He had one quarter, two dimes, and a penny.
      Did John have enough money to buy the toy if there was no tax?   Circle *yes* or *no*.

                                        $0.68

      How do you know?

☺ ☺   3. This is the time Abby's alarm goes off in the mornings.

          Abby's school begins one and a half hours later.
          What time does Abby start school: _____a.m.

☺ ☺ ☺ 4. If you counted six kids ahead of you in line for the bus, then counted seven
       kids behind you, how many kids were in line for the bus?
                                                                        _____ kids

☺   5. Put the numbers below in order from least to greatest.

574, 253, 123, 547, 808, 828

_____, _____, _____, _____, _____, _____

☺ ☺ ☺   6. Use this pizza to show some fractions. Each slice is one-eighth (1/8) of the pizza.

| Mark ate 4 slices. What fraction for the pizza did he eat? |
| _____ of the pizza |
| Sally ate 3 slices. What fraction of the pizza did she eat? |
| _____ of the pizza |
| After Sally and Mark ate, the dog got what was left over. What fraction of the pizza did the dog eat? |
| _____ of the pizza |

☺   7. Estimate, by rounding to the *nearest hundred,* the sum of :   321, 487, and 102

         Answer: My estimate is _____.

☺ ☺   8. Give an *exact answer.* Find the sum of the numbers in problem 7:   _____

☺ ☺   9. Subtract to find out how far off of the *exact answer* your *estimate* was in problems 7 and 8.

         Answer: My estimate was _____ away from the exact answer.

☺ ☺ ☺   1.   Four children are playing in the water.
                 How many toes are playing in the water?   _____ toes
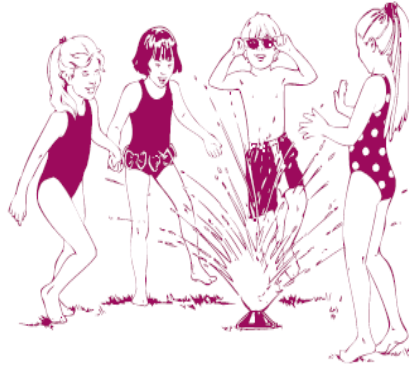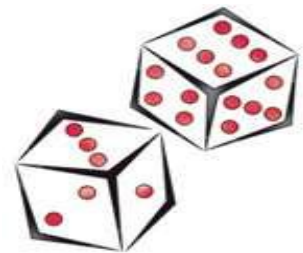

Show your work. Explain with pictures, words, or numbers.

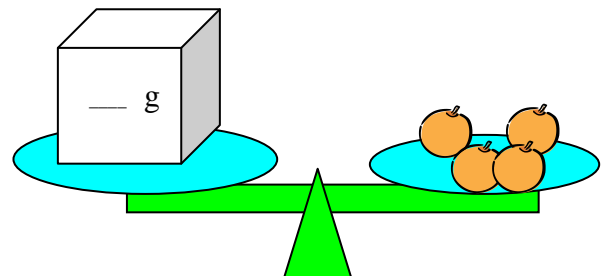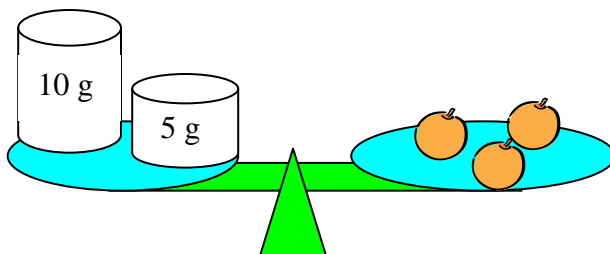☺ ☺   2.   Sarah rolled two dice. She rolled a three and a six.
                Was the sum of the two dice *even* or *odd*?   _____
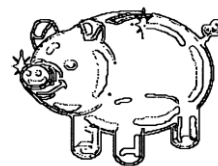
                How do you know?

☺ ☺ ☺ ☺ 3. How much weight does it take to balance 4 plastic oranges?
                Write the weight inside the box below.

☺   4.   Tommy has 3 quarters, 2 dimes, and 1 penny in his piggy bank.

How much money does he have? _____ ¢

☺ ☺   5. Can Tommy buy an ice cream cone for himself
        and one for his mom? _____
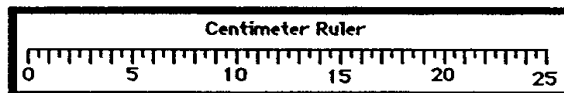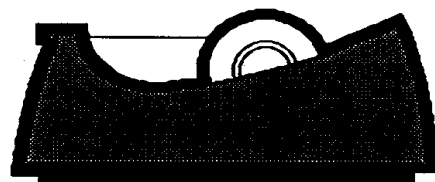
        Explain:

        Ice cream cone
        35¢

☺ ☺   6. How long is the tape holder below? _____ centimeters

        Thao said the tape holder was 25 centimeters
        long. Explain what was Thao doing wrong.

        Centimeter Ruler
        0   5   10   15   20   25

☺ ☺ ☺ 7. Write digits in the boxes below so the problems will be correct.

        a . 3 2 ☐   b. $7. ☐ 6   c. 3, 4 7 5
             +3 5   − . 4 5   +1 1 ☐
             3 5 7 $ 6 . 9 1   3, 5 8 9

☺ ☺   8. One piece of pizza costs 75 cents. There are six slices in each pizza.

        (a) How much would it cost to buy the whole pizza?   _____

        (b) If Sam ate 2 pieces, what fraction of the pizza did he eat? _____

☺   1. Becky and Ben were counting their $100 bills in a game of Monopoly.

... eight hundred;
   nine hundred;
   one thousand,
   one thousand, one hundred;
   one thousand, two hundred.
That's all my money.

... eight hundred;
   nine hundred;
   ten hundred;
   eleven hundred;
   twelve hundred.
That's all my money.

Who had the most money, or did they have the same amount? Tell how you know.

☺ ☺ ☺ ☺ 2. Take out 3 regular sheets of notebook paper. Each piece of paper is 8½ by 11 inches.
Estimate how many inches the *perimeter* is for one sheet of paper. (The *perimeter* is
how far it is around the outside edge.)   _____ inches

Now lay the 3 sheets down beside each other, with 11-inch sides touching. What is the
perimeter of the 3 sheets of paper?   ____ inches
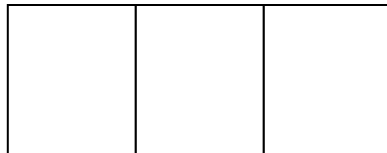
☺ ☺ ☺ 3. Take one of your sheets of notebook paper and fold it down the middle. Now turn it the
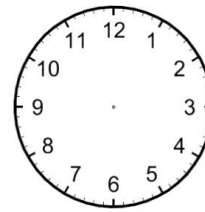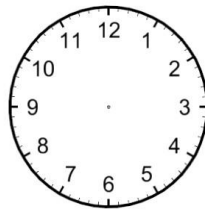other way and fold it down the middle again. It should look like this
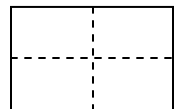
Color in 3 of the pieces. What *fraction* of the sheet of paper is colored? _____

☺ ☺   4. One orange weighs 8 ounces. How much will

a.   4 oranges weigh? _____
b.   7 oranges weigh? _____

☺ ☺   5. On the left, draw the hands on the clock to show 10:30. On the right, draw hands to show 3 hours after 10:30.

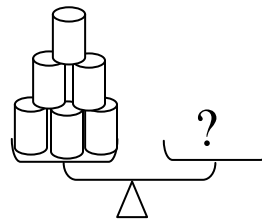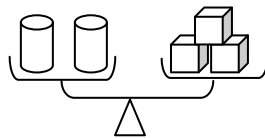☺ ☺ ☺ 6. Look at the number in the calculator's display window.

Which digit is in the *ones* place? _____

Which digit is in the *tens* place? _____

Which digit is in the *hundreds* place? _____

Which digit is in the *thousands* place? _____

☺ ☺   7. Two cylinders balance 3 cubes. How many cubes will balance with 6 cylinders? _____

☺ ☺ ☺ 8. In the problem above, if a cylinder weighs 15 grams, how much does a cube weigh?

Answer: _____ grams

Explain how you know: