Name_____Date_____Part 1

(5C)

1. Write a story problem that can be solved using the number sentence 18 + 36 = □.

_____

_____

_____

_____

_____

_____

_____

2. Write a story problem that can be solved using the number sentence 53 – 35 = □.

_____

_____

_____

_____

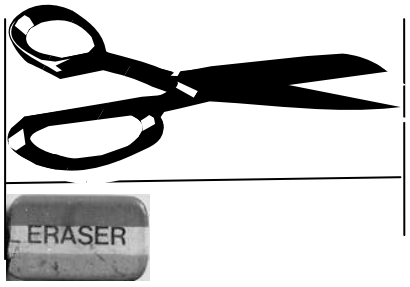
_____

_____

_____

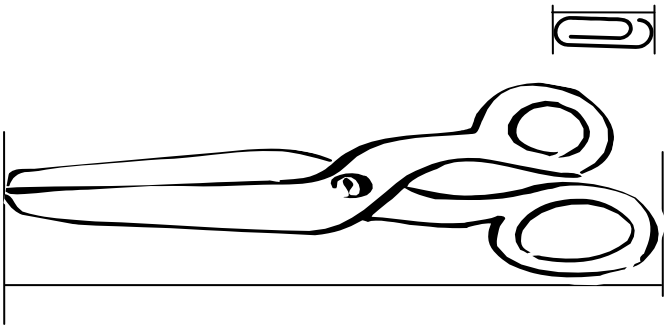
(15A)

3. **About** how many erasers would be the same length as the scissors?



- ◯ Less than 4
- ◯ Between 4 and 12
- ◯ Between 4 and 8
- ◯ More than 12

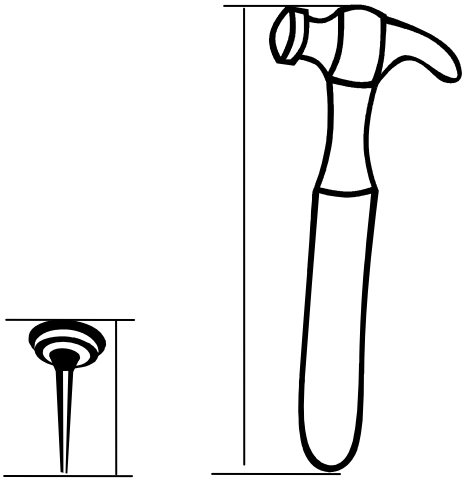
4. **About** how many paper clips long is the pair of scissors?



- ◯ 3
- ◯ 6
- ◯ 9
- ◯ 12

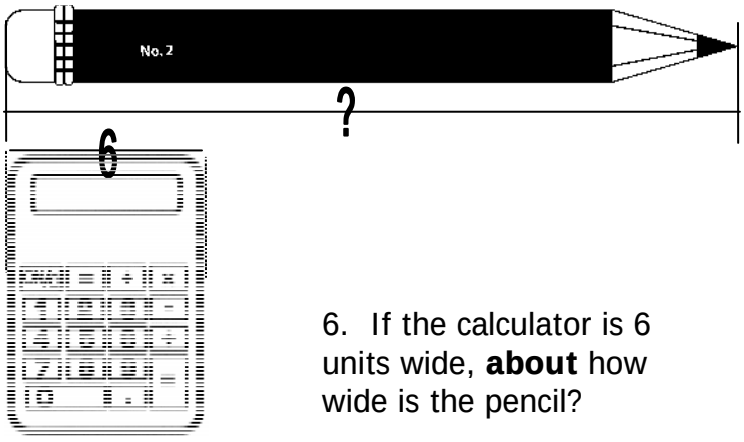
(15A)

5. Marc measured the height of the nail. It was 4 units long.



About how long is the hammer?

- ◯ less than 4
- ◯ between 5 and 9
- ◯ between 10 and 14
- ◯ more than 15

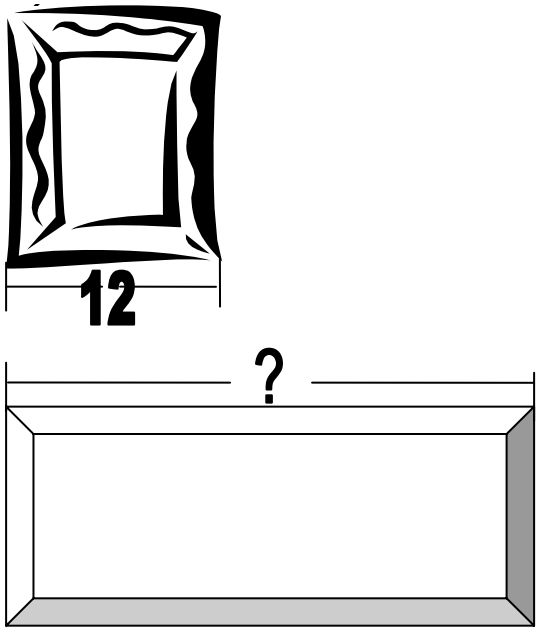


6. If the calculator is 6 units wide, **about** how wide is the pencil?

- ◯ 12
- ◯ 17
- ◯ 22
- ◯ 27

(15A)

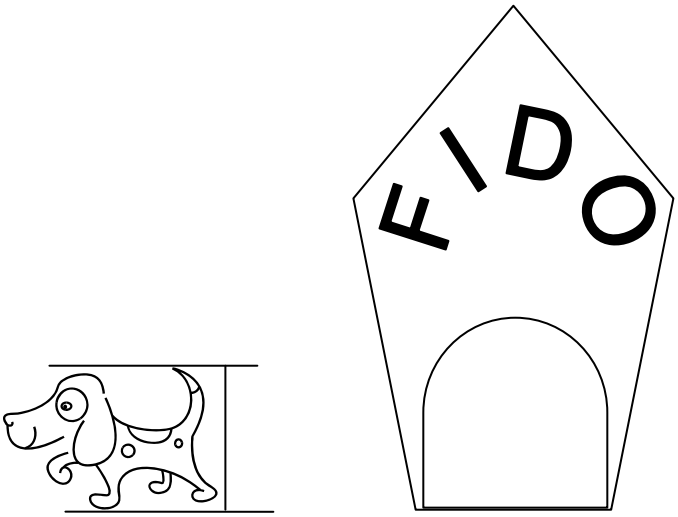
7. The picture frame is 12 units wide.



About how wide is the mirror?

- ◯ 18 units
- ◯ 27 units
- ◯ 36 units
- ◯ 42 units

(15A)

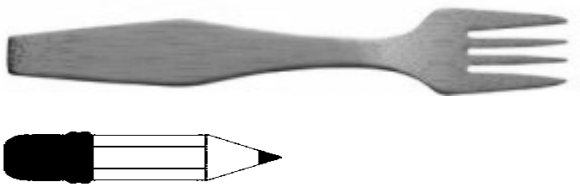


8. If the dog is 6 units tall, **about** how tall is the dog house?

- ◯ 10
- ◯ 20
- ◯ 30
- ◯ 40

(15A)

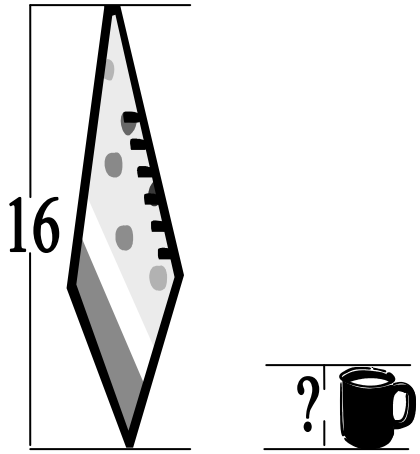
The fork is 12 units long.



9. **About** how many units long is the pencil?

- ○ 2
- ○ 4
- ○ 6
- ○ 8

10. Aaron measured his tie. It was 16 inches long.

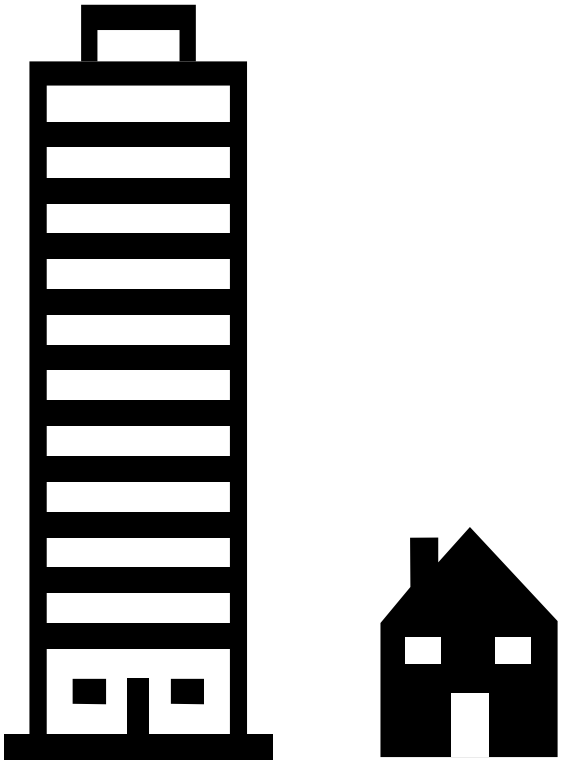


About how long is the cup?

- ○ less than 5
- ○ between 6 and 10
- ○ between 11 and 14
- ○ greater than 14

(15A)

11. If the tall building is 20 feet tall, **about** how tall is the short building?



- ○ 6
- ○ 10
- ○ 15
- ○ 18

12. If the large pencil is 9 inches long, **about** how long is the small key?

- ○ 1
- ○ 3
- ○ 6
- ○ 8

Name_____Date_____ Part 2

(16C)

1. The height of a telephone pole is **best** measured in

- ◯ inches
- ◯ feet
- ◯ miles
- ◯ gallons

2. The distance from Hartford to Boston is **best** measured in

- ◯ meters
- ◯ kilometers
- ◯ centimeters
- ◯ liters

3. What is a **reasonable** width for your thumb?

- ◯ 1 meter
- ◯ 1 centimeter
- ◯ 1 kilometer
- ◯ 1 yard

4. Which is the **best** unit to use when measuring the length of a postage stamp?

- ◯ liters
- ◯ meters
- ◯ kilometers
- ◯ centimeters

(16C)

5. What is a **reasonable** height for a skyscraper?

- ◯ 85 centimeters
- ◯ 85 meters
- ◯ 85 gallons
- ◯ 85 inches

6. The length of your finger is **best** measured in

- ◯ inches
- ◯ feet
- ◯ yards
- ◯ miles

7. What is the **best** unit to use when measuring the height of a door?

- ◯ inches
- ◯ centimeters
- ◯ yards
- ◯ kilometers

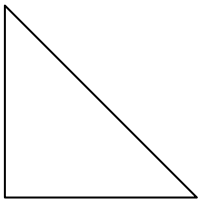
8. What is a **reasonable** width for a street?

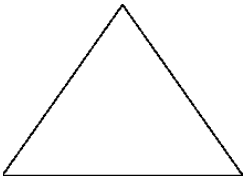
- ◯ 9 meters
- ◯ 9 centimeters
- ◯ 9 kilometers
- ◯ 9 grams

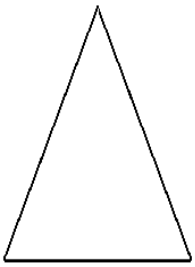
Name_____Date_____ Part 3

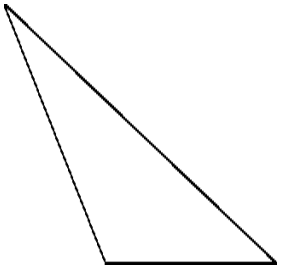
(17A)

1. Which shape is an equilateral triangle?

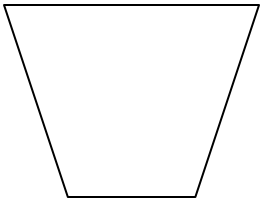
○ 

○ 

○ 

○ 

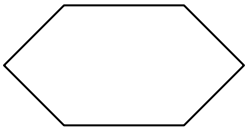
(17A)



2. What is the name of the figure?

○ hexagon
○ pentagon
○ rhombus
○ trapezoid

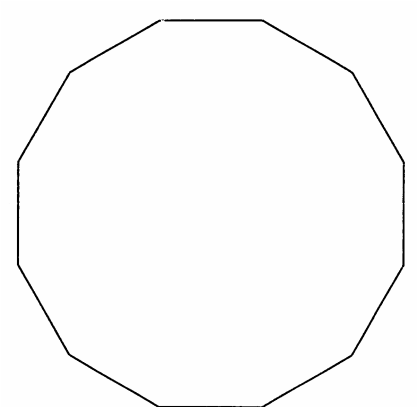
3. How many angles does the shape have?



○ 2
○ 4
○ 6
○ 8

(17A)

4. How many sides does the figure have?



- ○ 3
- ○ 6
- ○ 12
- ○ 24

5. What is a rectangle?

- ○ A quadrilateral with opposite sides equal in length
- ○ A quadrilateral with only 1 pair of parallel sides
- ○ A polygon with 6 sides
- ○ A polygon with 3 equal sides

(17A)

6. Which shape has exactly 4 equal sides?

- ○ rectangle
- ○ triangle
- ○ parallelogram
- ○ square ***

7. What is a pentagon?

- ○ a polygon with 1 pair of parallel sides
- ○ a polygon with 2 pairs of parallel sides
- ○ a polygon with 3 sides
- ○ a polygon with 5 sides

8. Which shape has 4 angles and exactly 2 pairs of parallel sides?

- ○ hexagon
- ○ trapezoid
- ○ parallelogram
- ○ equilateral triangle

9. Which shape has exactly 5 sides?

- ○ polygon
- ○ pentagon
- ○ trapezoid
- ○ triangle

10. Draw a parallelogram in the space below. (17B)

Explain why the shape you drew is a parallelogram.

_____

_____

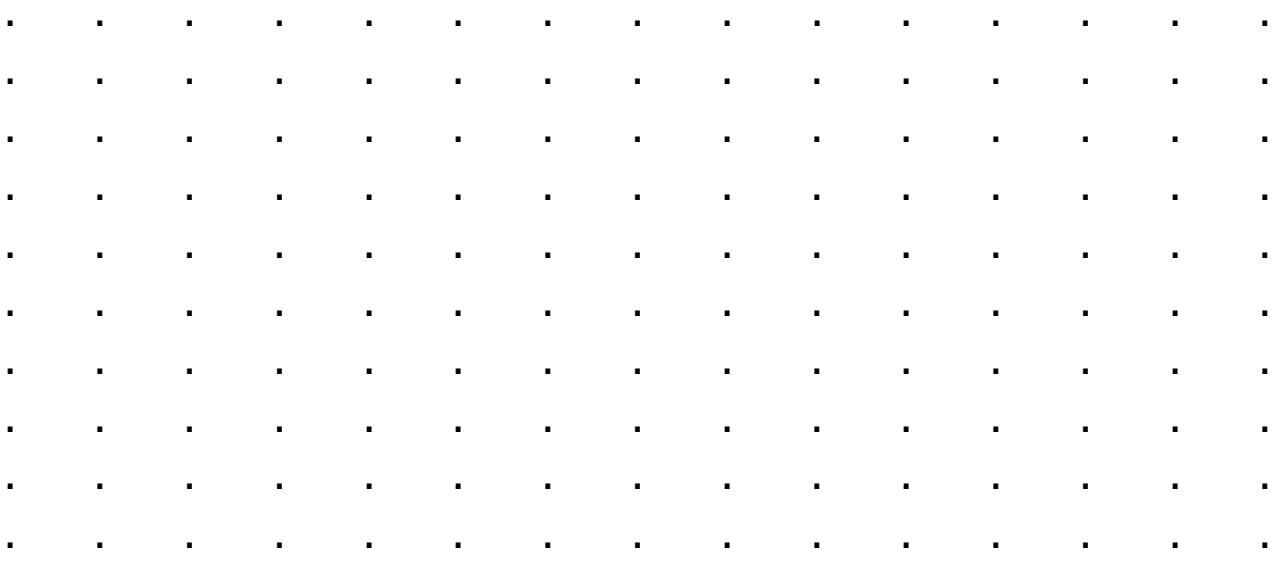
_____

_____

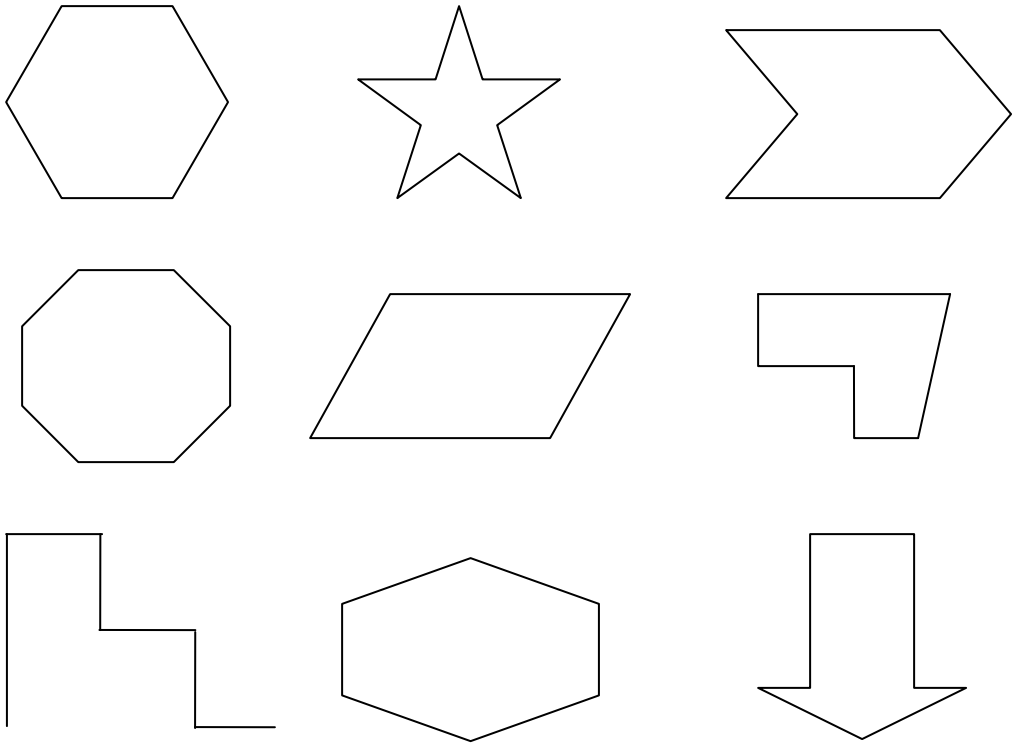
_____

_____

11. Draw a square. You may use the grid to help you.



12. Draw a ring around all the hexagons. (17B)



The following items are intended for practice only of the 4th Generation CMT content and format, not for instruction of concepts. Much teaching must precede the use of these items to ensure children's success both in mathematics and on the CMT.

Topic 2: Investigating Length - PACKET 2 – Sept. 3, 2007

- 5C: Write addition and subtraction story problems. [Multiplication Story Problems will be done later in the year.)
- 15A: Estimate lengths by comparing.
- 16C: Identify appropriate customary or metric units of measure for a given situation.
- 17A: Identify 2-dimensional geometric shapes
- 17B: Draw, identify and describe 2-D geometric shapes

Topic 2 – Extra CMT Practice (Not related to Topic 2 in GWM)

- 14A: Solve problems involving time, elapsed time (minutes and hours) and calendars.
- 14B. Solve problems involving conversions of measures of time.
- 15A: Estimate areas by comparing.
- 16A: Measure lengths to the nearest inch, half-inch or centimeter.
- 16B: Draw lengths to the nearest inch, half-inch or centimeter.
- 23A: Solve simple one-step algebraic equations involving addition, subtraction and fact families
- 25A: Solve extended numerical and statistical problems.

Original Packet for Topic 2 had just 1 or 2 examples of the objectives listed below. This packet will be called Packet 1. (August 11, 2005)

4B	Magnitude of whole numbers, fractions, mixed numbers, & decimals (tenths)
4E	No longer tested on 4th Generation Grade 4 Mastery Test
5C	Write story problems
7A	Computation (Addition and Subtraction)
15A	Estimation of Length and Area
16A	Measure lengths
16B	Draw lengths
16C	Identify appropriate units of length
17A	Identify 2-D shapes
19B	Create pictographs and bar graphs

Grade 4 GWM/CMT Practice: TOPIC 2 – PACKET 2

Name_____Date_____Part 1

(5C)

1. Write a story problem that can be solved using the number sentence 18 + 36 = □.

JOINING MODEL OF ADDITION: Imelda owned 18 pairs of red shoes. She bought 36 more pairs of red shoes. Now how many pairs of red shoes does she own?

COMBINED MODEL OF ADDITION: Imelda had 18 pairs of red shoes. She also had 36 pairs of turquoise shoes. (Turquoise???) How many pairs of red and turquoise shoes does she own?

2. Write a story problem that can be solved using the number sentence 53 – 35 = □.

TAKE-AWAY MODEL OF SUBTRACTION: Imelda had 53 certificates of deposit hidden inside her incredibly ugly turquoise shoes. She cashed in 35 of those certificates. How many certificates does she have uncashed?

COMPARISON MODEL OF SUBTRACTION: Imelda has 53 certificates of deposit collecting 5% interest. She also has 35 CD's collecting 8% interest. How many more certificates of deposit does she have collecting 5% interest rather than 8% interest?

MISSING ADDEND MODEL OF SUBTRACTION: Imelda had $53 in her wallet. Ferdinand had $35 in his wallet. How much money does Ferdinand need to embezzle in order to have as much money in his wallet as Imelda has?

COMBINED MODEL OF SUBTRACTION: Imelda has 53 pairs of shoes. 35 pairs of those shoes are red. How many pairs are turquoise? (Again with the ugly turquoise shoes?)

Scoring Rubric: Writing Story Problems (All 4 Operations)
Grade 5: 2nd Generation

2 Points: The student writes a story problem that matches a given number sentence.

- Situation followed by a question appropriate for the number sentence
- Correct numbers stated in situation, or number incorrect due to recording error
- Question implied rather than stated
  - John has 5 red pencils and 3 blue pencils. He has 8 pencils.
  - John has 5 red pencils and 3 blue pencils. He has 2 more red than blue pencils.

1 Point: The student translates a number sentence to a situation that is not appropriate for the specified operation.

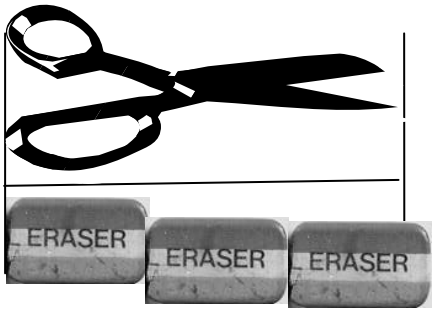
- Inappropriate situation followed by a question that requires the given operation
- Situation given, but question is neither stated nor implied

0 Points: The student does not write a story problem that matches a given number sentence.

- A "story" about the number sentence
- A statement about the number sentence
- Situation and question too vague to determine operation
- Number sentence copied
- Number sentence solved

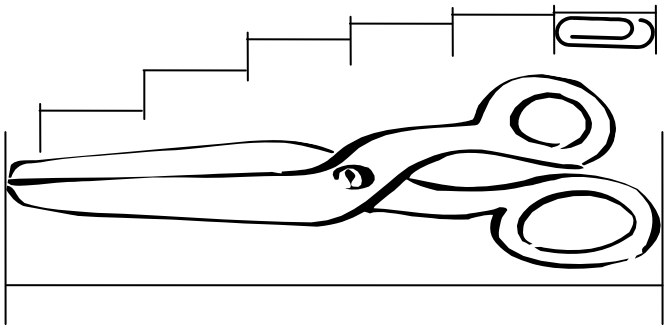
(15A)

3. **About** how many erasers would be the same length as the scissors?



- ◯ Less than 4 ***
- ◯ Between 4 and 8
- ◯ Between 8 and 12
- ◯ More than 12

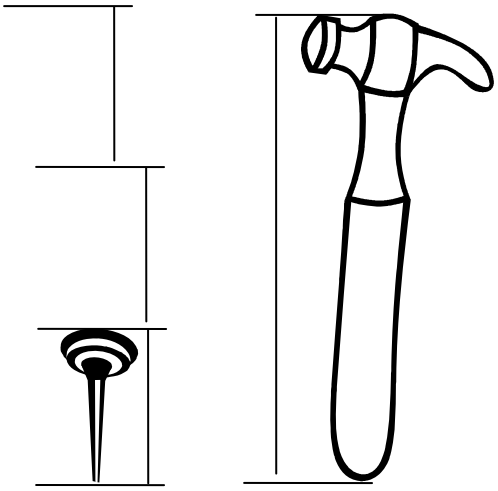
4. **About** how many paper clips long is the pair of scissors?



- ◯ 3
- ◯ 6 ***
- ◯ 9
- ◯ 12

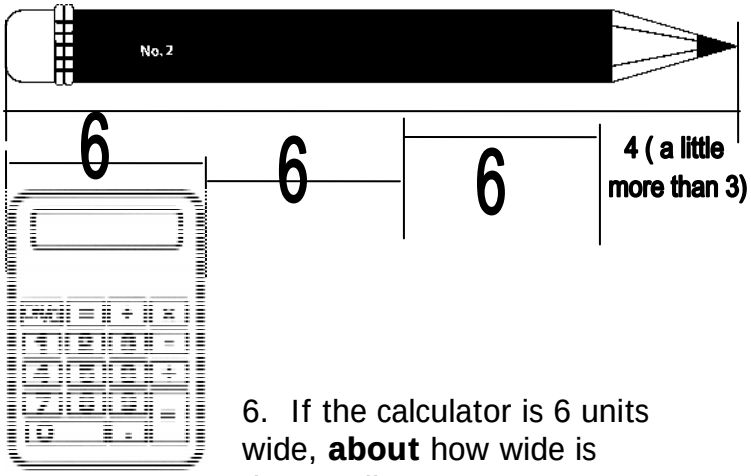
(15A)

5. Marc measured the height of the nail. It was 4 units long.



About how long is the hammer?

- ◯ less than 4
- ◯ between 5 and 9
- ◯ between 10 and 14 ***
- ◯ more than 15

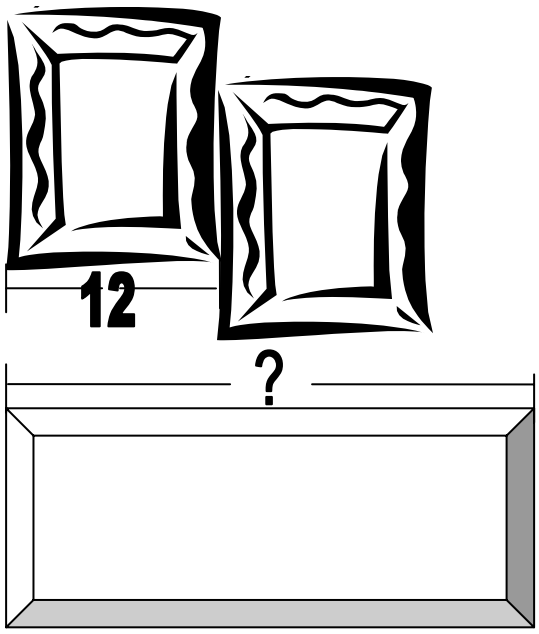


6. If the calculator is 6 units wide, **about** how wide is the pencil?

- ◯ 12
- ◯ 17
- ◯ 22 ***
- ◯ 27

(15A)

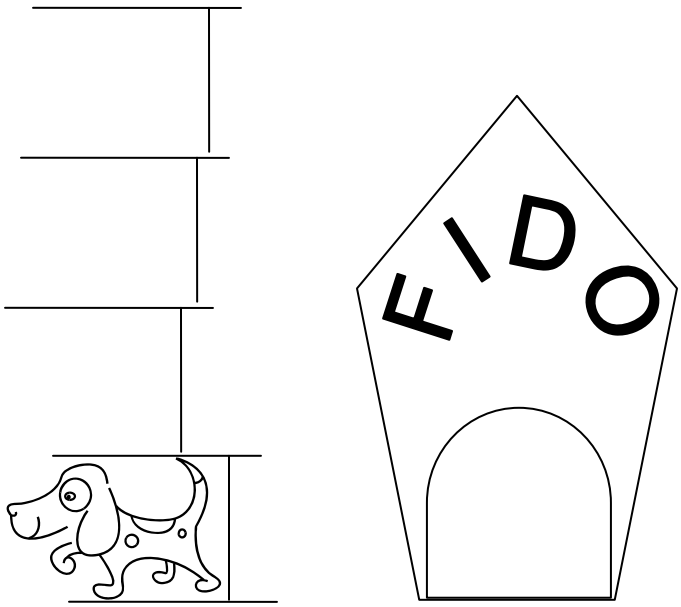
7. The picture frame is 12 units wide.



About how wide is the mirror?

- ◯ 18 units (less than 2 mirrors)
- ◯ 27 units (a little more than 2 mirrors) ***
- ◯ 36 units (3 mirrors wide)
- ◯ 42 units ($3\frac{1}{2}$ mirrors wide)

(15A)



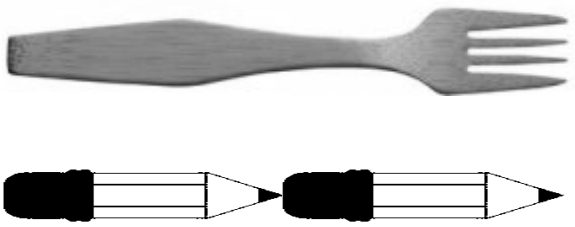
8. If the dog is 6 units tall, **about** how tall is the dog house?

- ◯ 10
- ◯ 20 ***
- ◯ 30
- ◯ 40

> 18 and < 24

(15A)

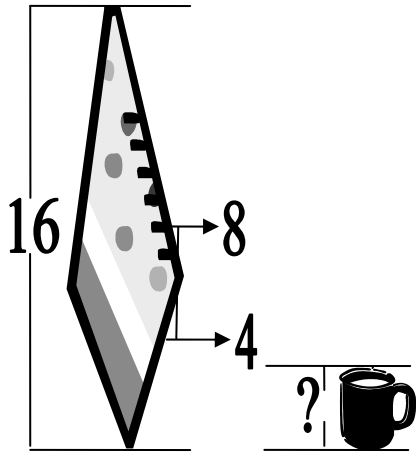
The fork is 12 units long.



9. **About** how many units long is the pencil?

- ◯ 2 (That would be 2 pencils long, not 2 units)
- ◯ 4
- ◯ 6 ***
- ◯ 8

10. Aaron measured his tie. It was 16 inches long.

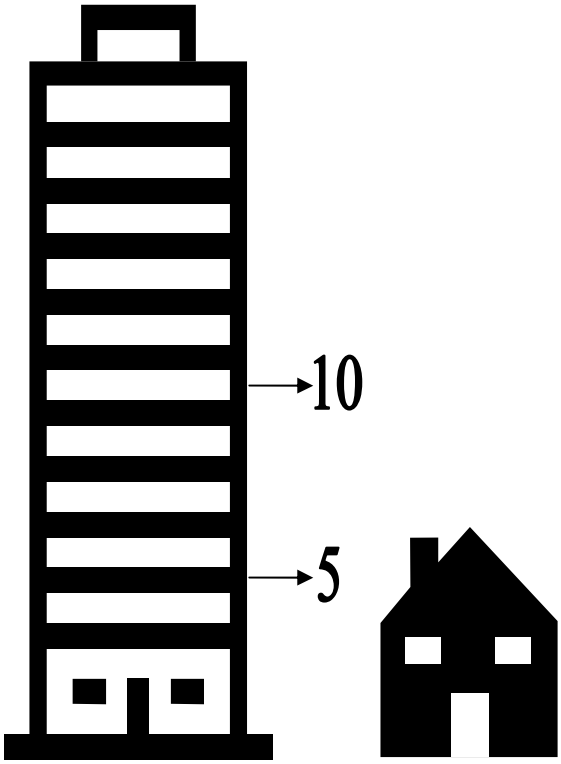


About how long is the cup?

- ◯ less than 5 ***
- ◯ between 6 and 10
- ◯ between 11 and 14
- ◯ greater than 14

(15A)

11. If the tall building is 20 feet tall, **about** how tall is the short building?

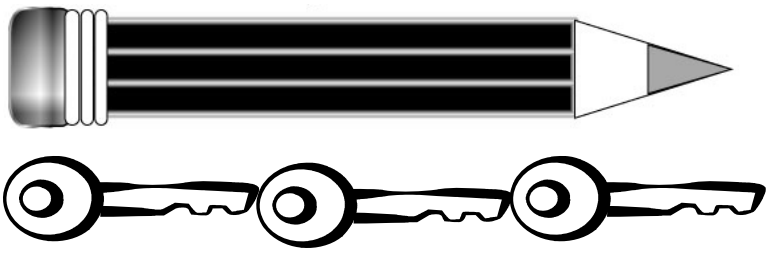


- ◯ 6 ***
- ◯ 10
- ◯ 15
- ◯ 18

House is between 5 and 10 units – also, a little more than 5

12. If the large pencil is 9 inches long, **about** how long is the small key?

- ◯ 1
- ◯ 6
- ◯ 3 ***
- ◯ 8



PROBLEM 12:

About how many keys long is the pencil? about 3

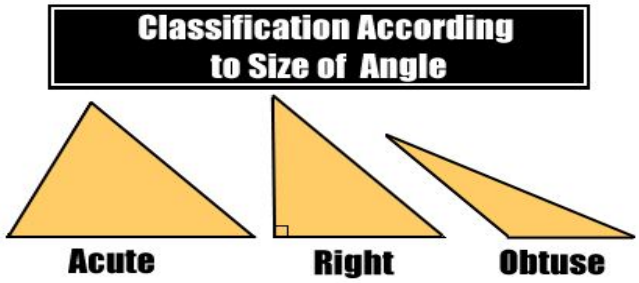
If the key is 1 inch long, 1 + 1 + 1 does not equal 9

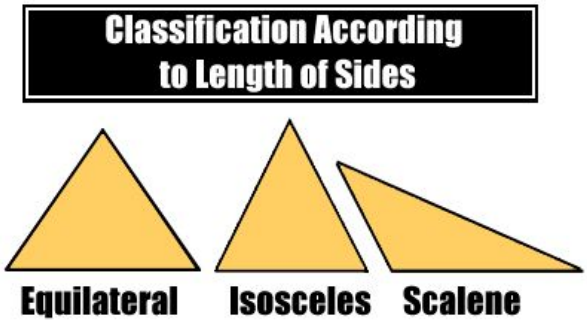
3 + 3 + 3 DOES equal 9; that means the key is 3 inches long

CMT Grade 4 Geometry Vocabulary: Objectives 17A and 17B – See Part 3 of this document

Unbold words: Grade 3
BOLD and CAPITALIZED words: New to Grade 4 CMT

Angle(s)
Circle
EQUILATERAL TRIANGLE
Figure (as in geometric figure)
Hexagon
Parallelogram
Pentagon
Polygon
QUADRILATERAL
Rectangle
Rectangular
Segment
Shape
Square
TRAPEZOID
Triangle
Unit (using dot paper)





Name_____Date_____ Part 2

(16C)

1. The height of a telephone pole is **best** measured in

- ◯ inches
- ◯ feet ***
- ◯ miles
- ◯ gallons

2. The distance from Hartford to Boston is **best** measured in

- ◯ meters
- ◯ kilometers ***
- ◯ centimeters
- ◯ liters

3. What is a **reasonable** width for your thumb?

- ◯ 1 meter
- ◯ 1 centimeter ***
- ◯ 1 kilometer
- ◯ 1 yard

4. Which is the **best** unit to use when measuring the length of a postage stamp?

- ◯ liters
- ◯ meters
- ◯ kilometers
- ◯ centimeters ***

(16C)

5. What is a **reasonable** height for a skyscraper?

- ◯ 85 centimeters
- ◯ 85 meters ***
- ◯ 85 gallons
- ◯ 85 inches

6. The length of your finger is **best** measured in

- ◯ inches ***
- ◯ feet
- ◯ yards
- ◯ miles

7. What is the **best** unit to use when measuring the height of a door?

- ◯ inches
- ◯ centimeters
- ◯ yards ***
- ◯ kilometers

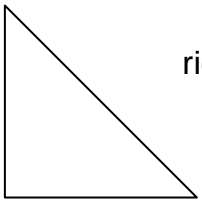
8. What is a **reasonable** width for a street?

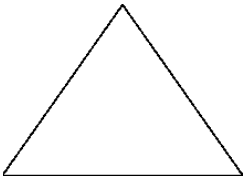
- ◯ 9 meters ***
- ◯ 9 centimeters
- ◯ 9 kilometers
- ◯ 9 grams

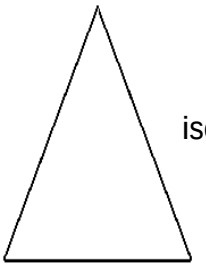
Name_____Date_____ Part 3

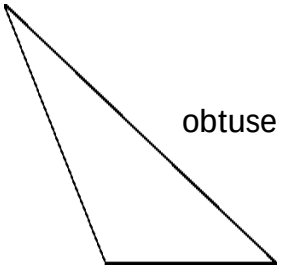
(17A)

1. Which shape is an equilateral triangle?

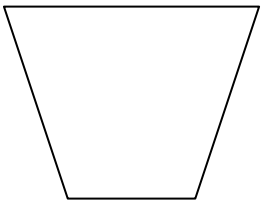
○  right triangle

○  **** all sides equal

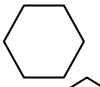
○  isosceles triangle

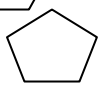
○  obtuse triangle

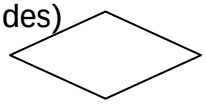
(17A)



2. What is the name of the figure?

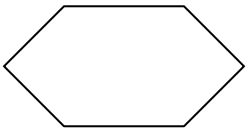
○ hexagon (6 sides) 

○ pentagon (5 sides) 

○ rhombus (4 equal sides, no right angles, 2 pairs of parallel sides) 

○ trapezoid ***

3. How many angles does the shape have?



○ 2

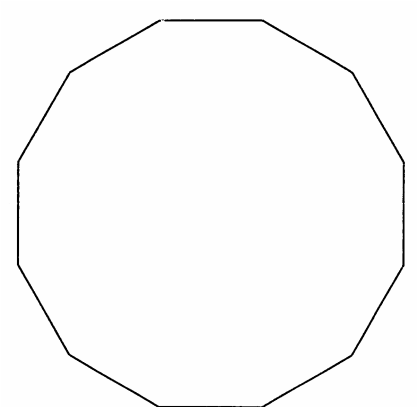
○ 4

○ 6 ***

○ 8

(17A)

4. How many sides does the figure have?



- ○ 3
- ○ 6
- ○ 12 ***
- ○ 24

5. What is a rectangle?

- ○ A quadrilateral with opposite sides equal in length ***
- ○ A quadrilateral with only 1 pair of parallel sides (TRAPEZOID)
- ○ A polygon with 6 sides (HEXAGON)
- ○ A polygon with 3 equal sides (EQUILATERAL TRIANGLE)

(17A)

6. Which shape has exactly 4 equal sides?

- ○ rectangle
- ○ triangle
- ○ parallelogram
- ○ square ***

7. What is a pentagon?

- ○ a polygon with 1 pair of parallel sides
- ○ a polygon with 2 pairs of parallel sides
- ○ a polygon with 3 sides
- ○ a polygon with 5 sides ***

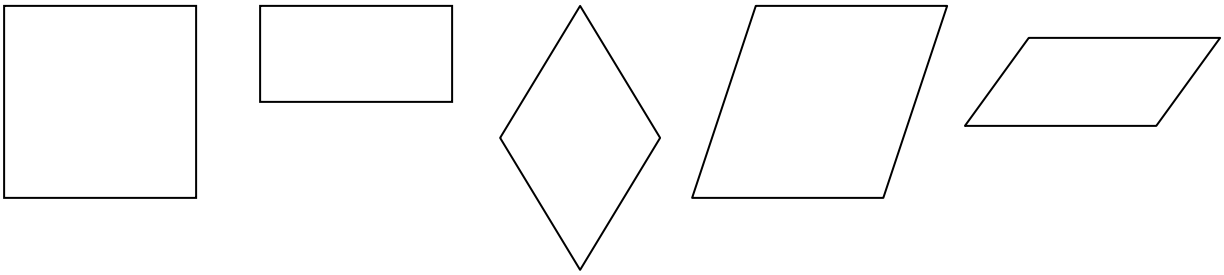
8. Which shape has 4 angles and exactly 2 pairs of parallel sides?

- ○ hexagon (has 6 angles)
- ○ trapezoid (1 pair of parallel sides)
- ○ parallelogram ***
- ○ equilateral triangle (3 angles and no parallel sides)

9. Which shape has exactly 5 sides?

- ○ polygon (has 3 or more sides)
- ○ pentagon ***
- ○ trapezoid (4 sides)
- ○ triangle (3 sides)

10. Draw a parallelogram in the space below. (17B)



Explain why the shape you drew is a parallelogram.

Important attributes to include in explanation:

- shape or figure with 4 sides or quadrilateral or polygon with 4 sides
- 2 pairs of parallel sides or opposite sides parallel

_____

_____

_____

11. Draw a square. You may use the grid to help you.

ANSWER: Any shape with 4 equal sides and 4 right angles is correct

12. Draw a ring around all the hexagons. (17B)