Name _____ Date _____ Class _____

Skill: Least Common Multiple

Investigation 3

Prime Time

List multiples to find the LCM of each set of numbers.

1. 5, 10

2. 2, 3

3. 6, 8

4. 4, 6

5. 8, 10

6. 5, 6

7. 12, 15

8. 8, 12

9. 9, 15

10. 6, 15

Name _____ Date _____ Class _____

Skill: Greatest Common Factor

Investigation 3

Prime Time

List the factors to find the GCF of each set of numbers.

1. 8, 12

2. 18, 27

3. 15, 23

4. 17, 34

5. 24, 12

6. 18, 24

7. 5, 25

8. 20, 25

9. 10, 15,

10. 25, 75

Name _____ Date _____ Class _____

Skill: Adding and Subtracting Fractions

Investigation 2

Bits and Pieces II

Find each sum or difference.

1. $\frac{1}{4}+\frac{2}{4}$
2. $\frac{7}{10}-\frac{4}{10}$
3. $\frac{5}{8}-\frac{3}{8}$
4. $\frac{1}{8}+\frac{5}{8}$
5. $\frac{5}{8}+\frac{2}{8}$
6. $\frac{3}{10}+\frac{6}{10}$
7. $\frac{2}{5}-\frac{1}{10}$
8. $\frac{5}{8}-\frac{1}{4}$
9. $\frac{3}{10}+\frac{4}{5}$
10. $\frac{11}{16}+\frac{5}{8}$
11. $\frac{2}{3}-\frac{1}{6}$
12. $\frac{3}{5}+\frac{7}{10}$

Name _____ Date _____ Class _____

Skill: Adding and Subtracting Mixed Numbers

Investigation 2

Bits and Pieces II

Find each sum or difference.

1. $4\frac{3}{10}+5\frac{2}{5}$
2. $3\frac{7}{8}+2\frac{1}{2}$
3. $5\frac{2}{3}+3\frac{1}{4}$
4. $6\frac{3}{4}+2\frac{1}{2}$
5. $1\frac{1}{12}+3\frac{1}{6}$
6. $9\frac{2}{5}+10\frac{3}{10}$
7. $7\frac{1}{3}+5\frac{11}{12}$
8. $11\frac{7}{10}+4$
9. $2\frac{2}{3}+4\frac{3}{4}$
10. $10\frac{11}{16}-3\frac{7}{8}$
11. $8\frac{1}{3}-2\frac{3}{8}$
12. $9-3\frac{2}{5}$
13. $5\frac{3}{16}-2\frac{3}{8}$
14. $8\frac{1}{6}-3\frac{2}{5}$
15. $7\frac{1}{2}-3$

Name _____ Date _____ Class _____

Skill: Multiplying Mixed Numbers

Investigation 3

Bits and Pieces II

Find each product.

1. $2\frac{5}{6} \times 1\frac{3}{4}$
2. $3\frac{3}{8} \times 7\frac{1}{4}$
3. $5\frac{3}{8} \times 2\frac{7}{8}$
4. $\frac{1}{4} \times 5\frac{2}{5}$
5. $1\frac{1}{2} \times 5\frac{1}{3}$
6. $\frac{3}{4} \times 1\frac{3}{5}$
7. $3\frac{1}{3} \times 3\frac{3}{10}$
8. $5\frac{1}{2} \times \frac{2}{5}$
9. $1\frac{2}{3} \times 3\frac{3}{4}$

Name _____ Date _____ Class _____

Skill: Dividing Mixed Numbers

Investigation 4

Bits and Pieces II

Find each quotient.

1. $1\frac{1}{2} \div \frac{2}{3}$
2. $1\frac{1}{2} \div \frac{3}{2}$
3. $\frac{3}{4} \div 1\frac{1}{3}$
4. $2\frac{1}{2} \div 1\frac{1}{4}$
5. $2\frac{1}{2} \div 2\frac{1}{4}$
6. $1\frac{3}{4} \div \frac{3}{4}$
7. $1\frac{7}{10} \div \frac{1}{2}$
8. $3\frac{1}{4} \div 1\frac{1}{3}$
9. $4\frac{1}{2} \div 2\frac{1}{2}$
10. $6 \div 3\frac{4}{5}$
11. $4\frac{3}{4} \div \frac{7}{8}$
12. $5\frac{5}{6} \div 1\frac{1}{3}$

Name _____ Date _____ Class _____

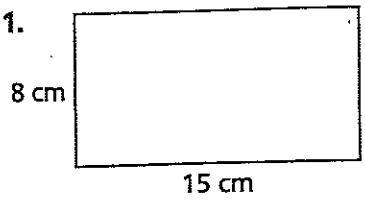
Skill: Area and Perimeter of Rectangles

Investigation 1

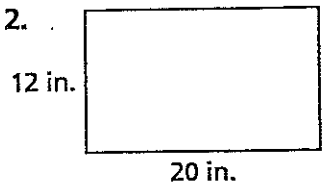
Covering and Surrounding

Find the perimeter and area of each rectangle.

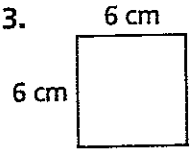
1.



2.



3.



4. $\ell = 5$ in., $w = 13$ in.

5. $\ell = 18$ m, $w = 12$ m

6. $\ell = 3$ ft, $w = 8$ ft

7. rectangle: $l = 16$ mm, $w = 12$ mm

8. rectangle: $l = 65$ mi, $w = 48$ mi

9. The length of a rectangle is 8 centimeters. The width is 6 centimeters.
   a. What is the area?

   b. What is the perimeter?

10. The area of a rectangle is 45 square inches.
    One dimension is 5 inches. What is the perimeter?

Name _____ Date _____ Class _____

Skill: Percents, Fractions, and Decimals

Investigation 4

Bits and Pieces I

Write each percent as a decimal and as a fraction.

1. 46%
2. 17%
3. 90%
4. 5%

Write each decimal as a percent and as a fraction.

5. 0.02
6. 0.45
7. 0.4
8. 0.92

Write each fraction as a decimal and as a percent.

9. $\frac{3}{5}$
10. $\frac{7}{10}$
11. $\frac{13}{25}$
12. $\frac{17}{20}$

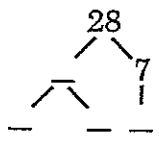
Name _____ Date _____ Class _____

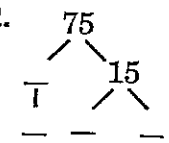
Skill: Prime Factorization

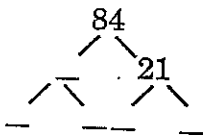
Investigation 4

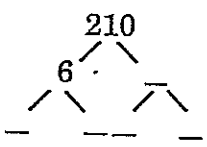
Prime Time

Complete each factor tree.

1. 

2. 

3. 

4. 

Find the prime factorization of each number.

5. 58
6. 72
7. 40
8. 310

Find the number with the given prime factorization.

9. $2 \times 2 \times 5 \times 7 \times 11$
10. $7 \times 11 \times 13 \times 17$

11. There are 32 students in a class. How many ways can the class be divided into groups with equal numbers of students? What are they?

Name _____ Date _____ Class _____

Skill: Mean, Median, and Mode

Investigation 3

Data About Us

For Exercises 1–3, use the table.

1. What is the mean height of the active volcanoes listed to the nearest foot?

2. What is the median height of the active volcanoes listed?

3. What is the mode of the heights of the active volcanoes listed?

Active Volcanoes	
Name	Height Above Sea Level (ft)
Cameroon Mt.	13,354
Mount Erebus	12,450
Asama	8,300
Gerde	9,705
Sarychev	5,115
Ometepe	5,106
Fogo	9,300
Mt. Hood	11,245
Lascar	19,652

Name _____ Date _____ Class _____

Skill: Line Plots

Investigation 1

Data About Us

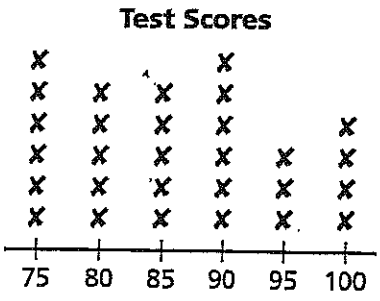
Ms. Makita made a line plot to show the scores her students got on a test. At the right is Ms. Makita's line plot.

1. What does each data item or ✘ represent?

2. How many more students scored 75 than scored 95?

3. How many students scored over 85?

4. What scores did the same number of students get?



Problems involving time

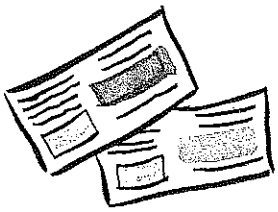
Find the answer to this problem.

A train leaves the station at 7:30 A.M. and arrives at the end of the line at 10:45 A.M. How long did the journey take? 3 hours 15 minutes

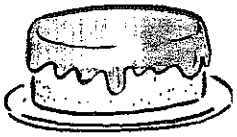
7:30 → 10:30 = 3 h
10:30 → 10:45 = 15 min
Total = 3 h 15 min

Find the answer to each problem.

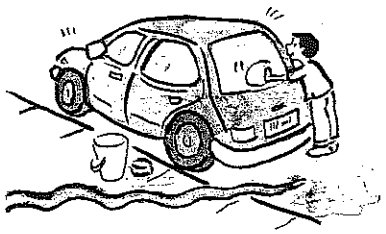
A film starts at 7:00 P.M. and finishes at 8:45 P.M. How long is the film?



A cake takes 2 hours 25 minutes to bake. If it begins baking at 1:35 P.M., at what time will the cake be done?

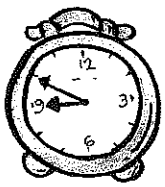


Sanjay needs to clean his bedroom and wash the car. It takes him 1 hour 10 minutes to clean his room and 45 minutes to clean the car. If he starts at 10:00 A.M., at what time will he finish?



A car is taken in for repair at 7:00 A.M. It is finished at 1:50 P.M. How long did the repairs take?

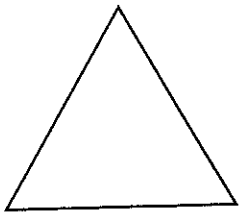
Claire has to be at school by 8:50 A.M. If she takes 1 hour 30 minutes to get ready, and the trip takes 35 minutes, at what time does she need to get up?



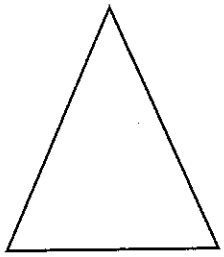
A bus leaves the bus station at 8:45 A.M. and arrives back at 10:15 A.M. How long has its trip taken?

Triangles

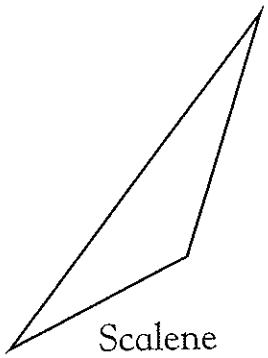
Look at these different triangles.



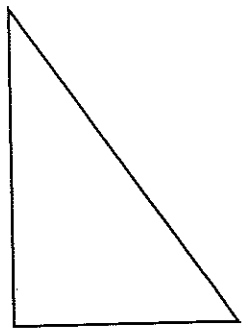
Equilateral
(all sides equal; is also isosceles)



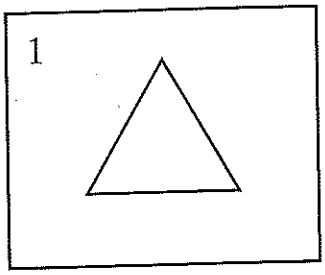
Isosceles
(two sides equal)

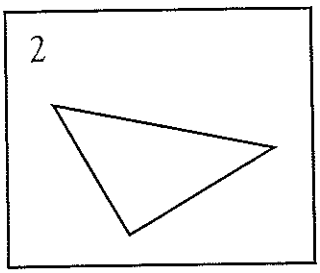


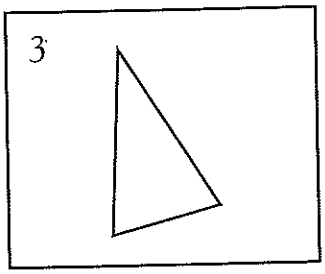
Scalene
(all sides different)

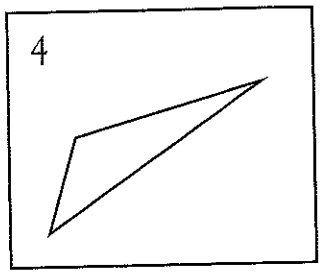


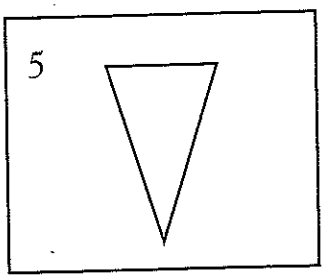
Right angle
(may be isosceles or scalene, but one angle must be a right angle)

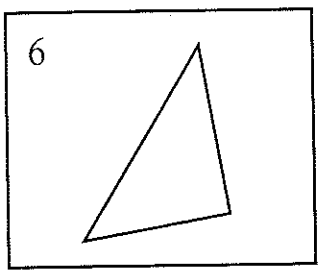


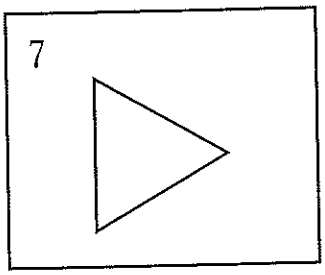


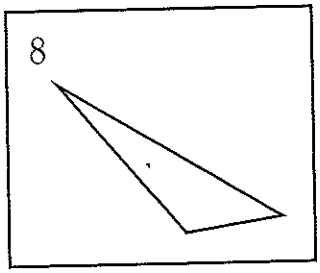


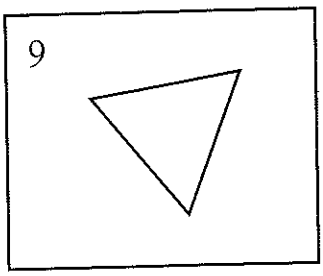


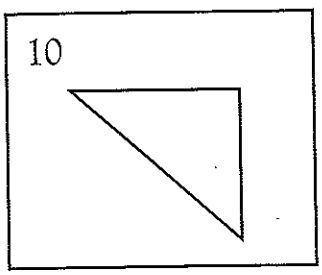


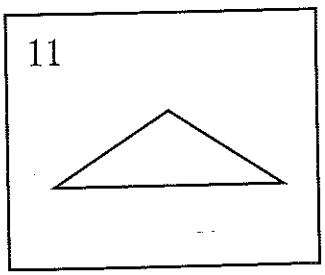


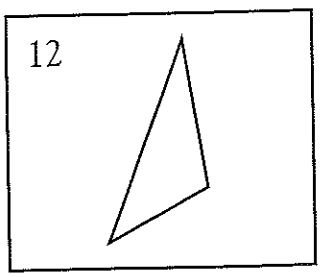












List the triangles that are:

Equilateral _____

Isosceles _____

Scalene _____

Right angle _____

Appropriate units of measure

Choose the best units to measure the length of each item.

inches	*feet*	*yards*

notebook	car	swimming pool
inches	feet	yards

Choose the best units to measure the length of each item.

inches	*feet*	*yards*

bed	bicycle	toothbrush	football field
shoe	driveway	canoe	fence

The height of a door is about 7 .

The length of a pencil is about 7 .

The height of a flagpole is about 7 .

Choose the best units to measure the weight of each item.

ounces	*pounds*	*tons*

train	kitten	watermelon	tennis ball
shoe	bag of potatoes	elephant	washing machine

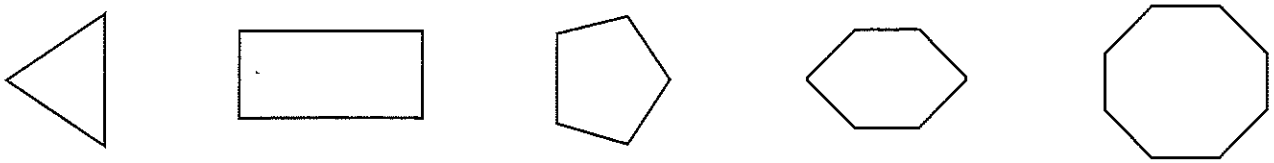
The weight of a hamburger is about 6 .

The weight of a bag of apples is about 5 .

The weight of a truck is about 4 .

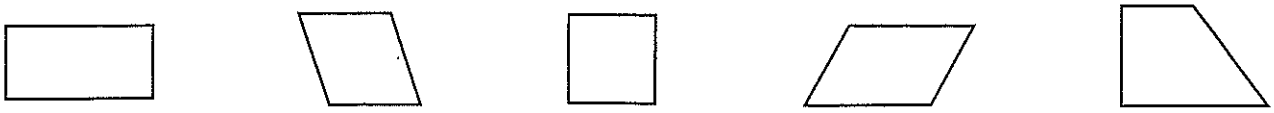
Naming polygons

Polygons are named for the number of sides they have.



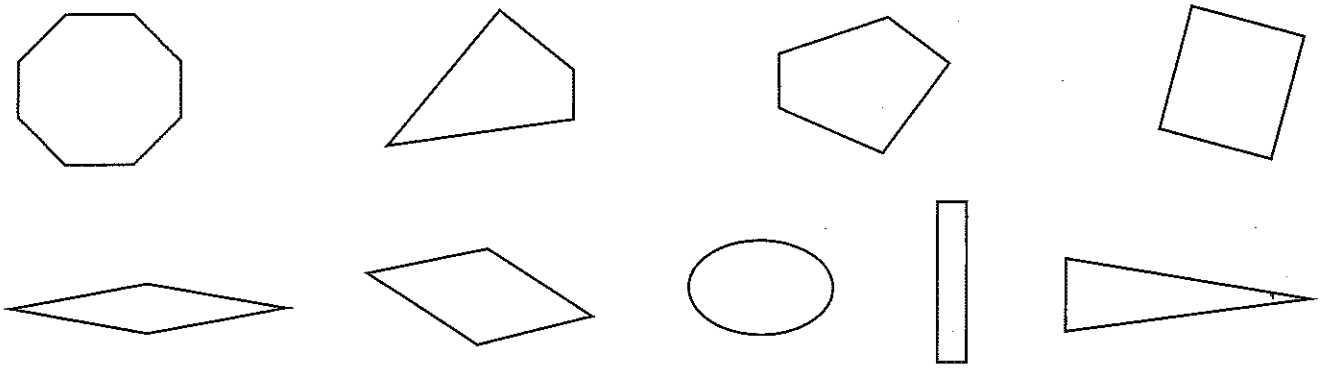
triangle quadrilateral pentagon hexagon octagon

Quadrilaterals, which have four sides, can be different shapes.

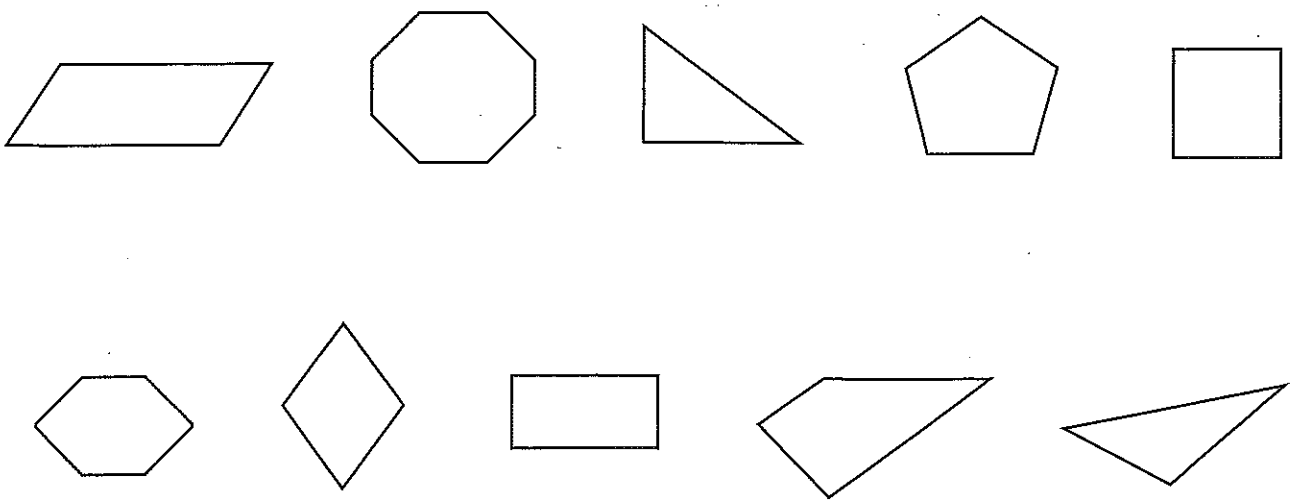


rectangle rhombus square parallelogram trapezoid

Circle the quadrilaterals.

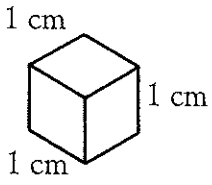


Write the name of each polygon in the box.

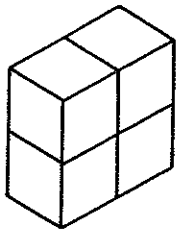


Volumes of cubes

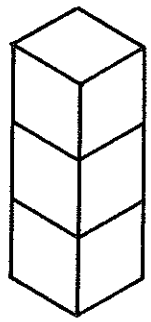
This cube is 1 cm long, 1 cm high, and 1 cm wide. We say it has a volume of 1 cubic centimeter (1 cm^3).



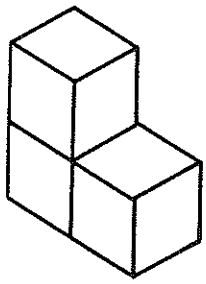
If we put 4 of these cubes together the new shape has a volume of 4 cm^3.



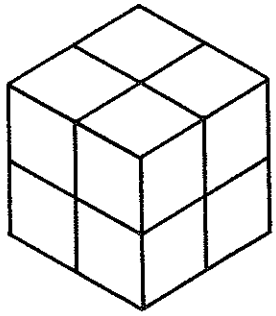
These shapes are made of 1 cm^3 cubes. What are their volumes?



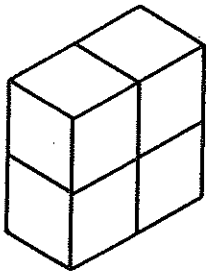
cm^3



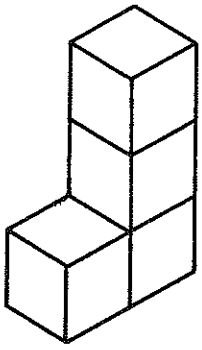
cm^3



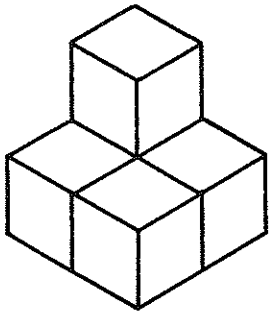
cm^3



cm^3



cm^3



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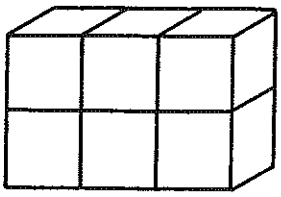

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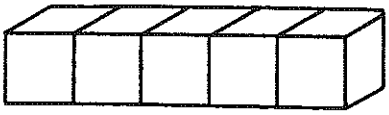

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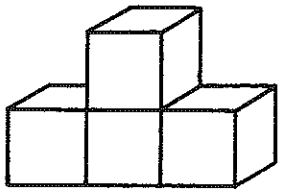

cm^3

Conversions: capacity

Units of capacity	
8 fluid ounces	1 cup
2 cups	1 pint
2 pints	1 quart
4 quarts	1 gallon

This conversion table shows how to convert ounces, cups pints, quarts, and gallons.

Katya's thermos holds 8 pints. How many cups does it hold?

8 x 2 = 16 16 cups

Hannah's thermos holds 6 cups. How many pints does it hold?

6 ÷ 2 = 3 3 pints

Convert each measurement to cups.

32 fluid ounces	16 fluid ounces	96 fluid ounces	80 fluid ounces

Convert each measurement to pints.

6 cups	12 cups	36 cups	50 cups
4 quarts	12 quarts	30 quarts	6 quarts

Convert each measurement to gallons.

16 quarts	32 quarts	100 quarts	20 quarts

Convert each measurement.

3 gallons pints	5 quarts cups	36 cups quarts	72 pints gallons
1 quart fluid ounces	240 fluid ounces pints	7 quarts cups	11 gallons pints