

6

positive rational

$\frac{2}{9}$

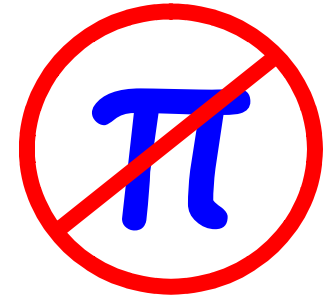
$\frac{1}{3}$

2.125 numbers

3

1235439.2581

0.007



# factor

To find the **product**, I need to multiply **factors**.

$$2 \times 3 = 6$$

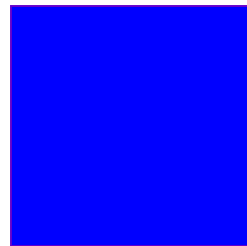
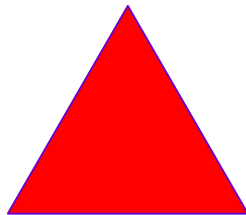
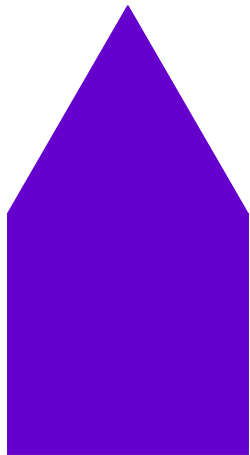
$$15 = 5 \times 3$$

# multiple

Multiples of 12 – 12, 24, 36, 48, 60, 72

Multiples of 18 – 18, 36, 54, 72, 90, 108

# decompose

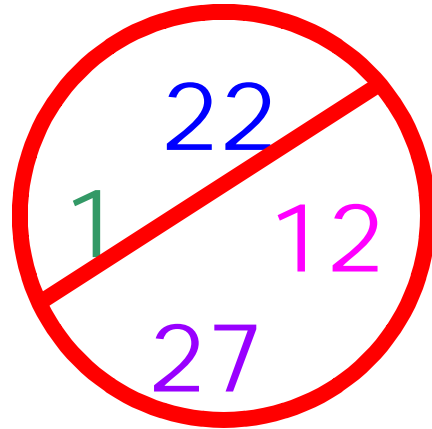


$$36 = 2^2 \cdot 3^2$$

# prime numbers

2

41



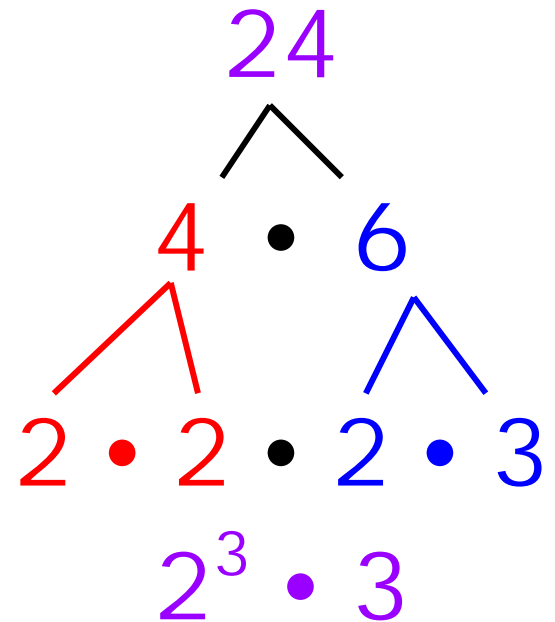
83

29

101

67

# prime factorization



# Fundamental Theorem of Arithmetic

$$6936 = 2^3 \cdot 3 \cdot 17^2 \qquad 1200 = 2^4 \cdot 3 \cdot 5^2$$

## GCF

Factors of 12 – 1, 2, 3, 4, 6, 12

Factors of 18 – 1, 2, 3, 6, 9, 18

GCF is 6

# LCM

Multiples of 12 – 12, 24, 36, 48, 60, 72

Multiples of 18 – 18, 36, 54, 72, 90, 108

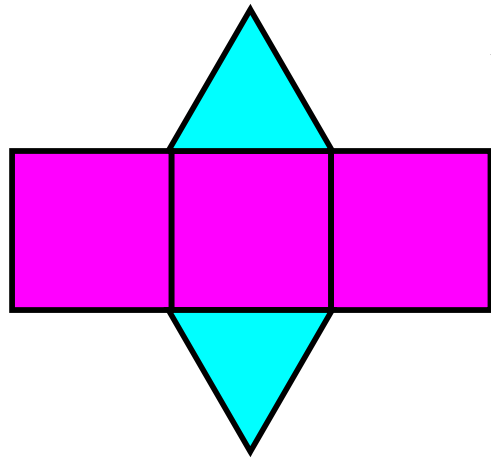
LCM is 36

# evaluate

Evaluate  $3x$  for

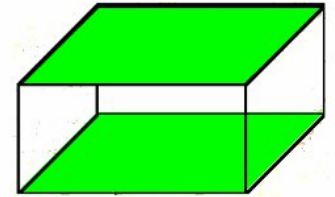
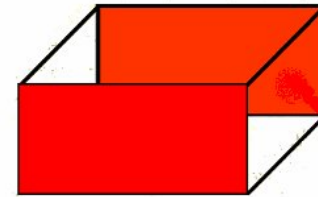
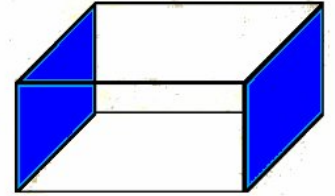
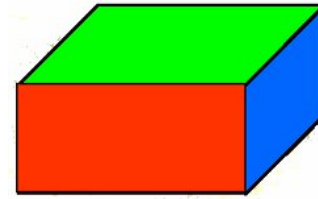
$x = 2, 5, 10, 12$

x	3x
2	6
5	15
10	30
12	36



surface

area



kg

metric system of

L

liter

measurement

milliliter

cm

kilometer

mL

centimeter

km

kilogram

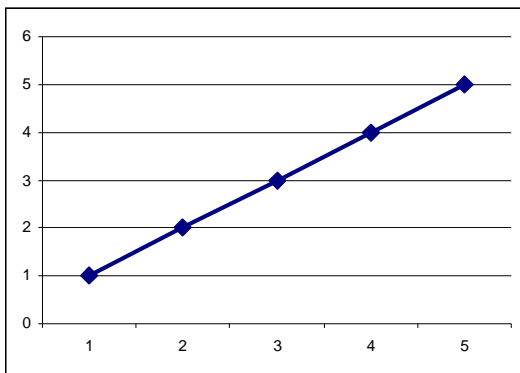
yd customary system qt  
mile of measurement pound  
inch lb in yard ft  
quart foot m

$$F - 32 = 1.8C$$

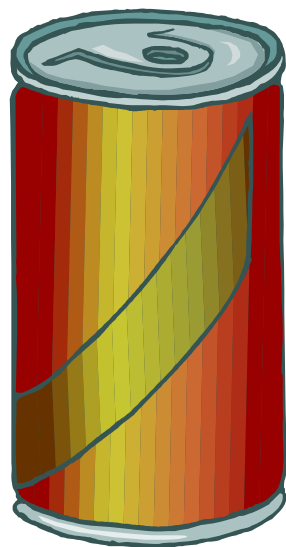
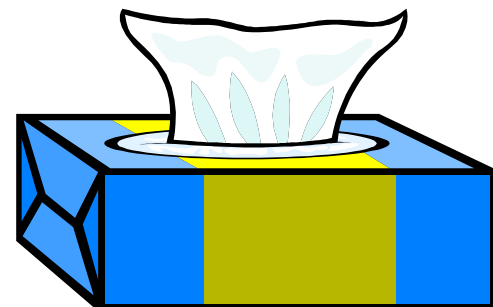
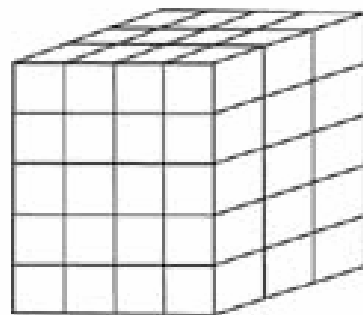
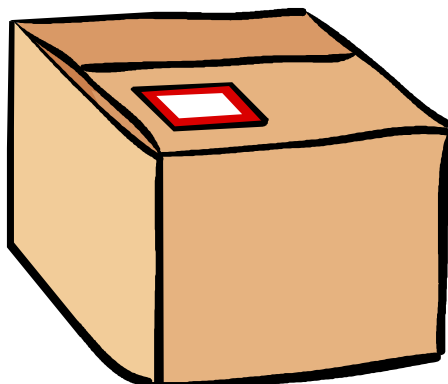
proportional  $y = 2.5x$

relationship

height and shadow length



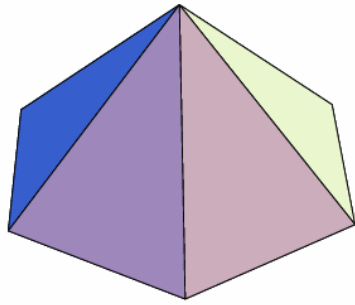
right rectangular prism



cylinder

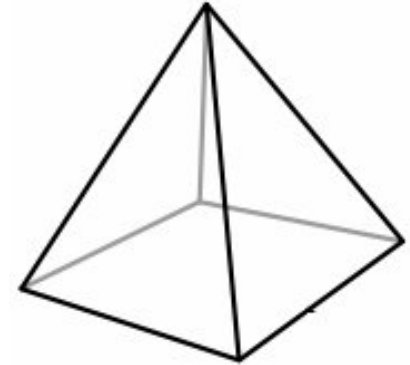




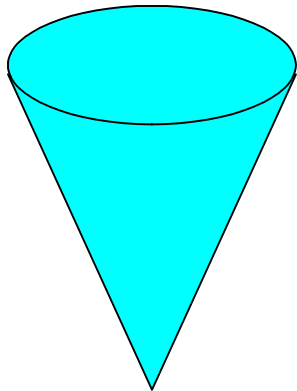


hexagonal  
pyramid

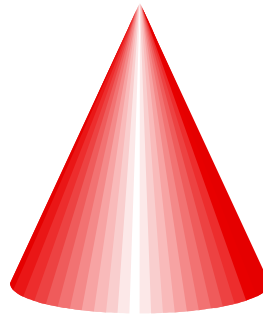
# pyramid



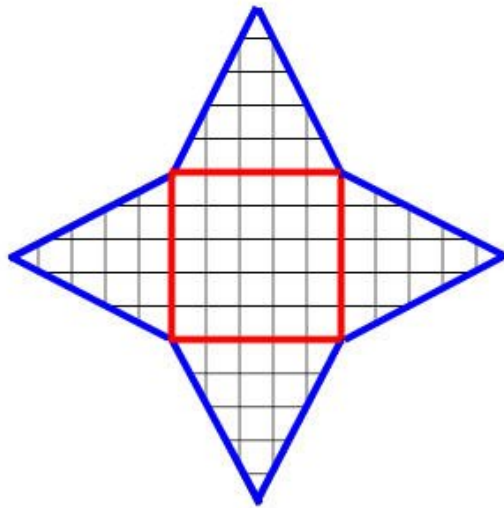
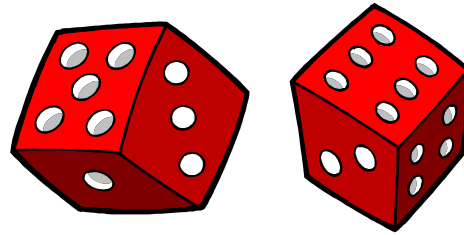
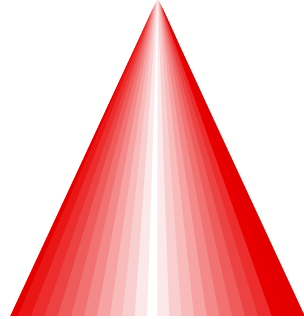
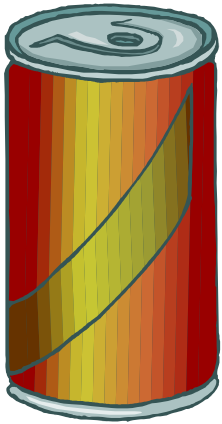
triangular  
pyramid



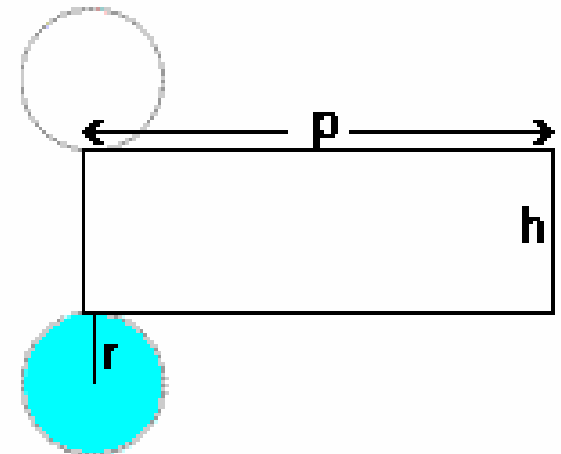
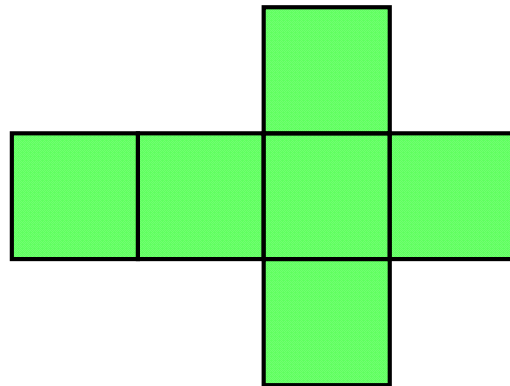
# cone

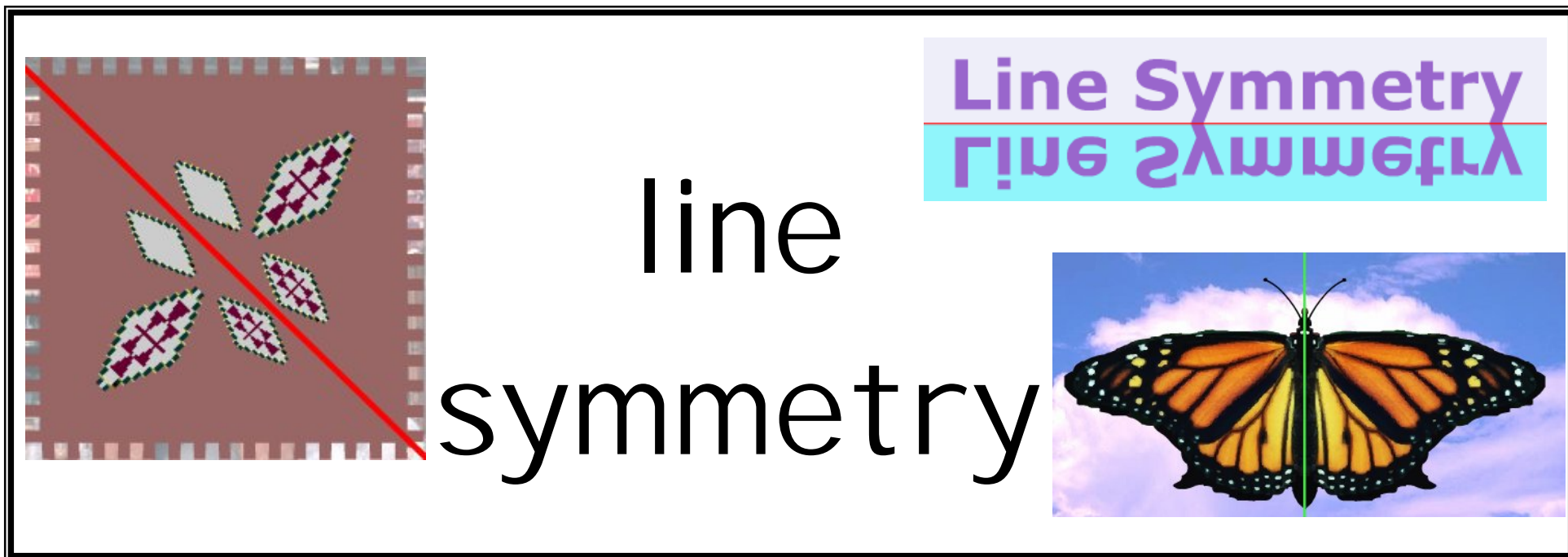
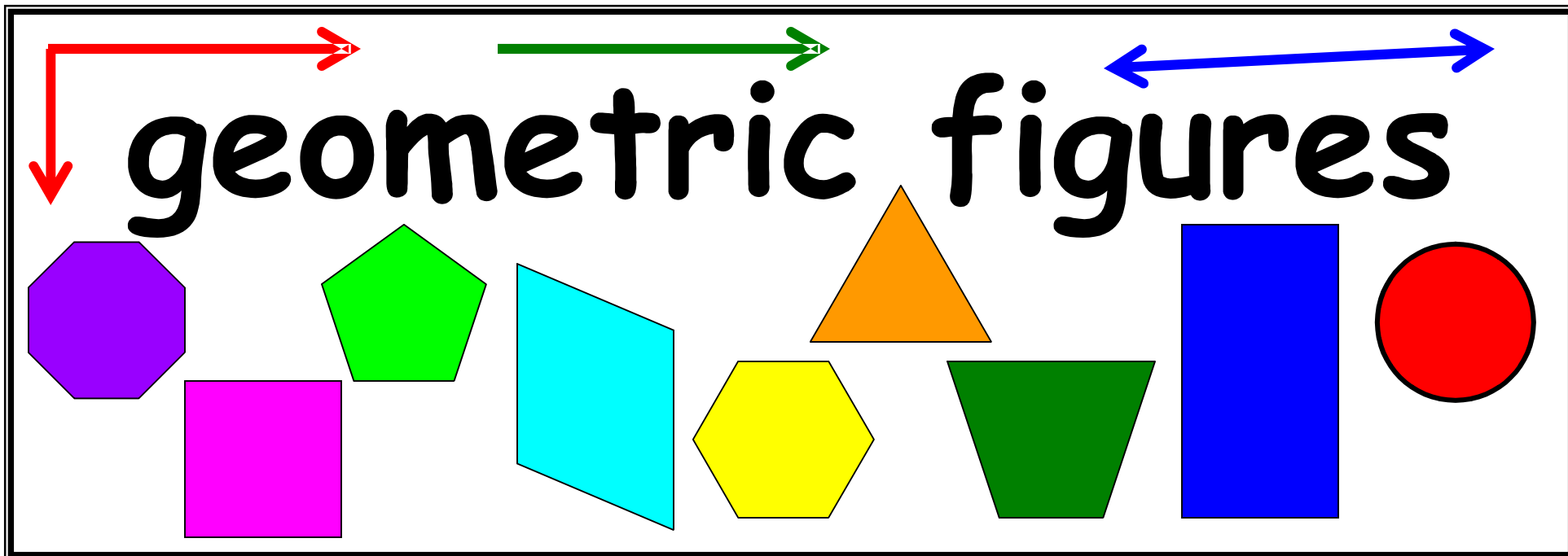


# geometric solid



net

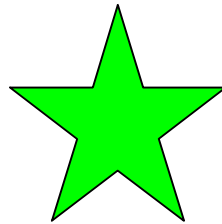
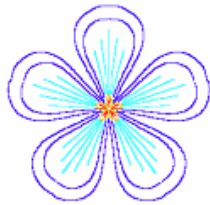




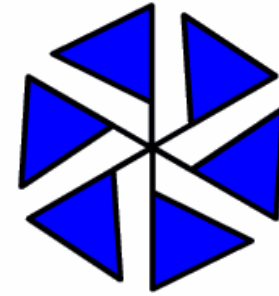
# rotational symmetry



2-fold

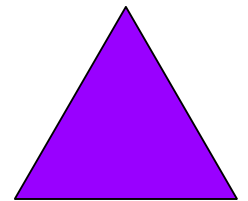
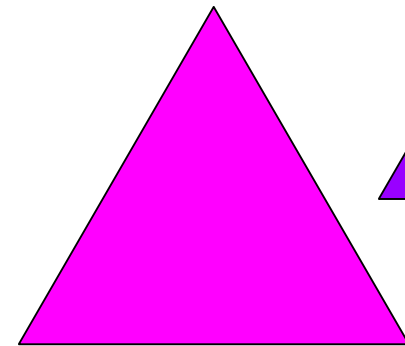
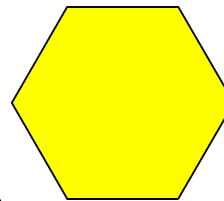
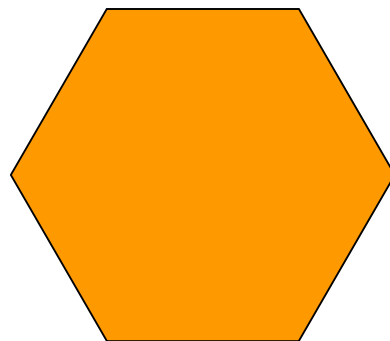
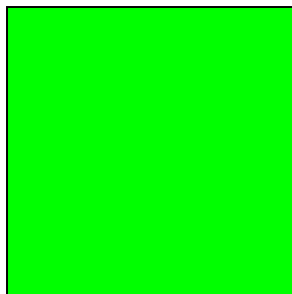
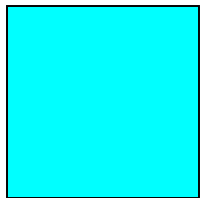


5-fold

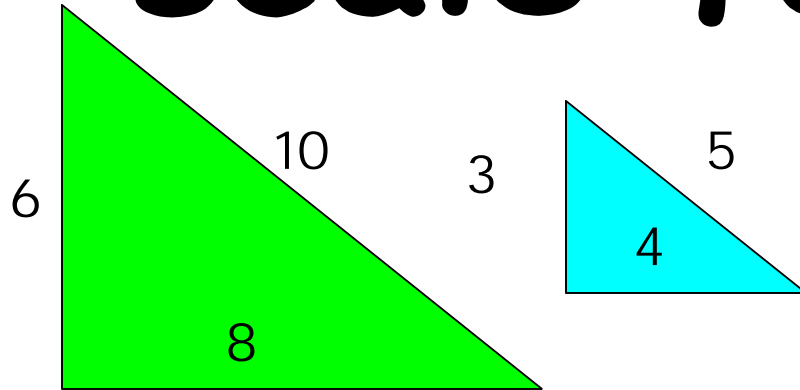


6-fold

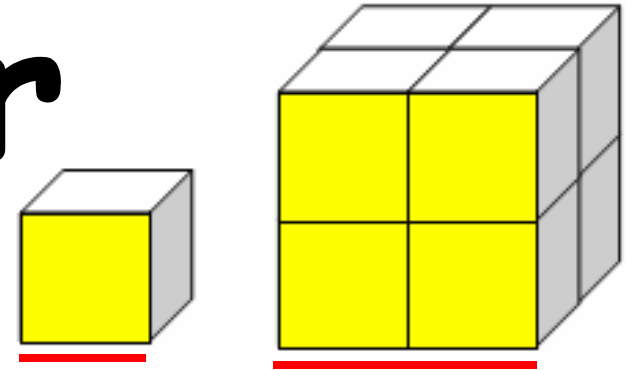
# similar plane figures



# scale factor



Scale factor is 2 or 2:1

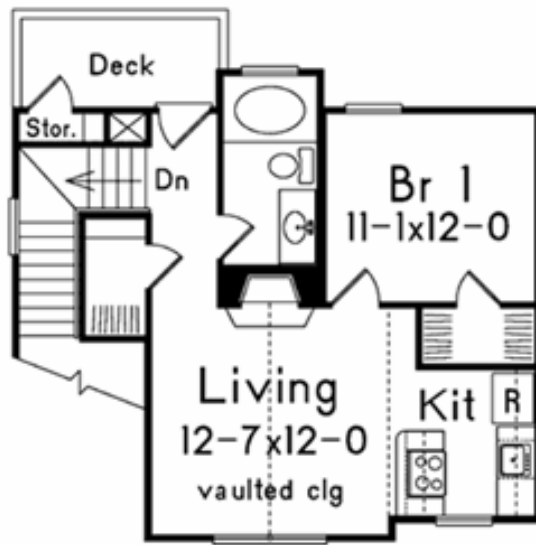


**Length** - scale factor is 2

**Area** - scale factor is 4

**Volume** - scale factor is 8

# scale drawing



ratio

# relations

order

>, <

equality

=

divisibility

proportions

# varying quantities

proportions

$2n$

$$y = kx$$

$\frac{1}{2}b$

210 miles to 7 gallons

30 miles per gallon

# ratio

6 boys

8 girls

6 : 8  $\frac{3}{4}$

Ratio of dogs to bones is 2:3.

6 to 8

There are 6 bones. How many dogs?

# direct proportion

Salary = \$15.00 x Number of hours worked

$$S = 15x$$

Hours Worked	1	1.5	2	5	10
Salary	\$15.00	\$22.50	\$30.00	\$75.00	\$150.00

# proportion

$$\frac{2}{5} = \frac{4}{n}$$

$$n = 10$$

$$n = 10$$

$$\frac{a}{b} = \frac{c}{d}$$

$$\frac{4}{7} = \frac{12}{21}$$

# proportional reasoning

1 U.S. dollar = 0.92 Euro

Which is more, \$1 or 1 Euro?

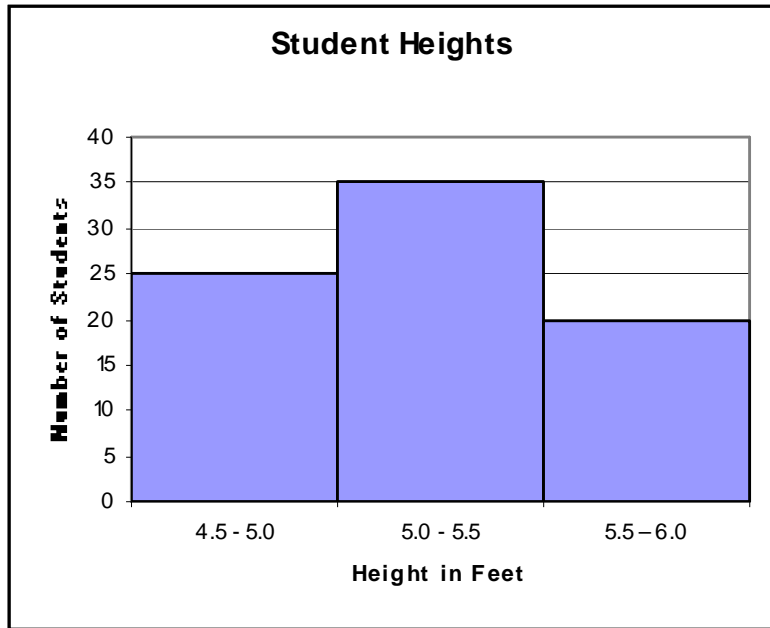
Why?

100 luks = 1 tuk

? luks = 3 tuks

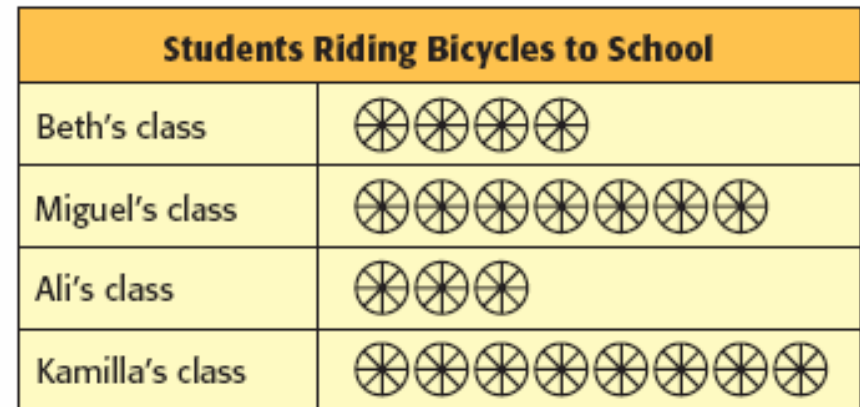


# frequency distributions



Height range	# of students
4.5 - 5.0	25
5.0 - 5.5	35
5.5 - 6.0	20

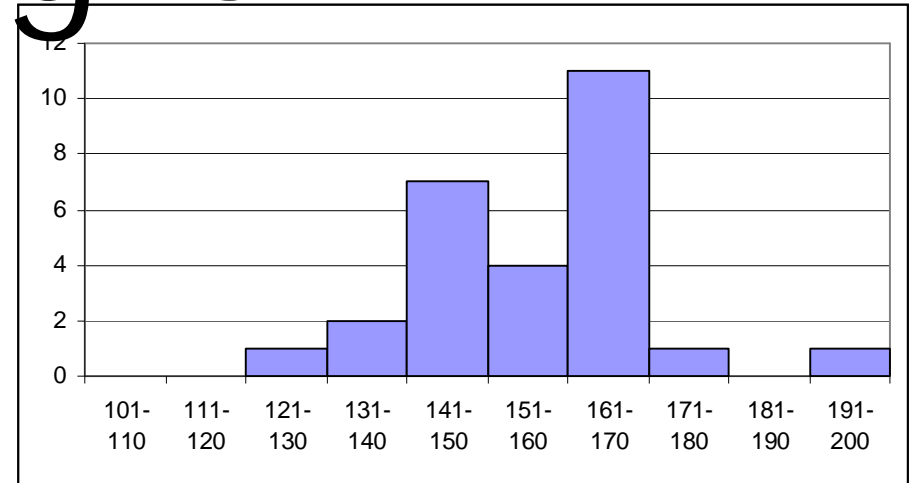
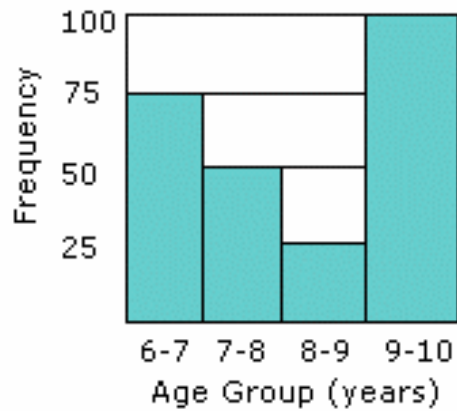
# pictograph



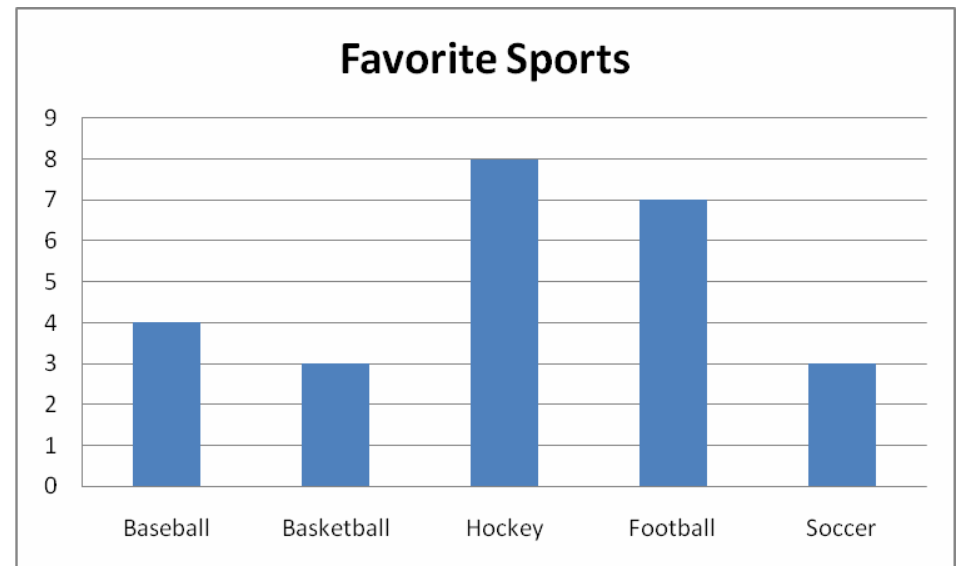
Each represents one student.

# histogram

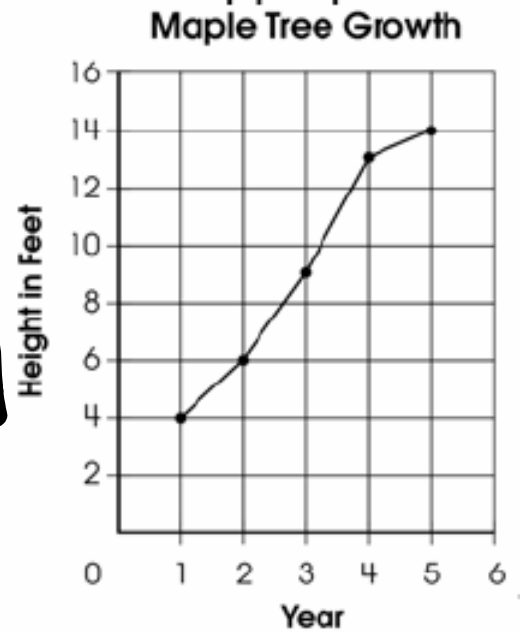
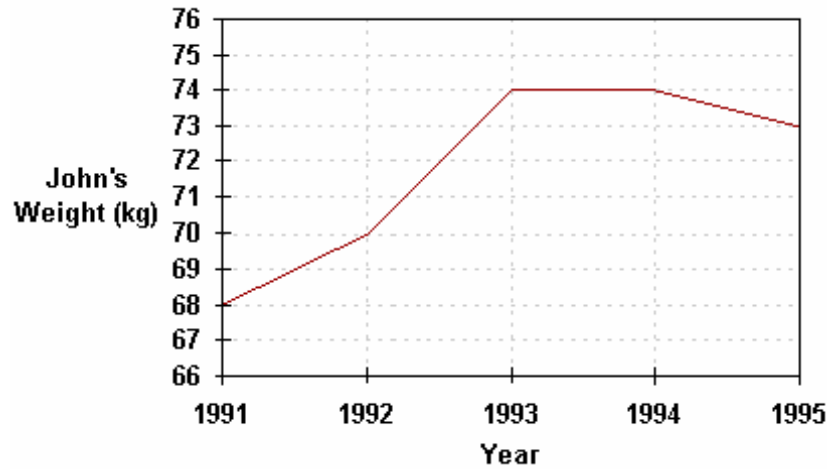
Number of Children Visited a Zoo



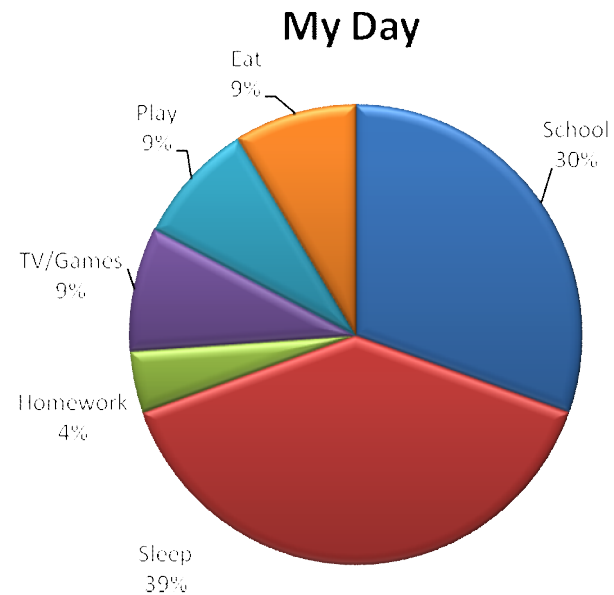
# bar graph



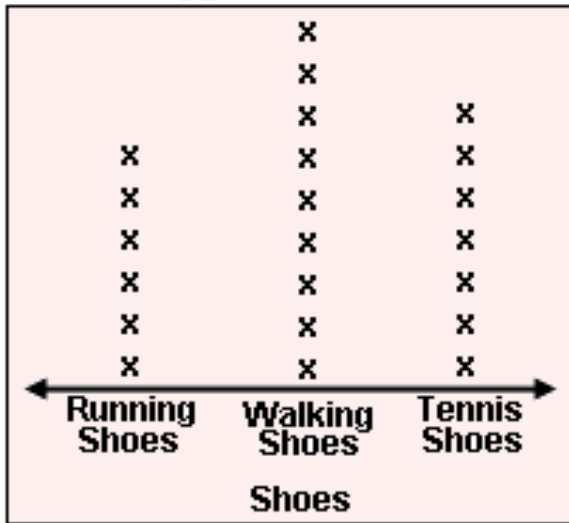
# line graph



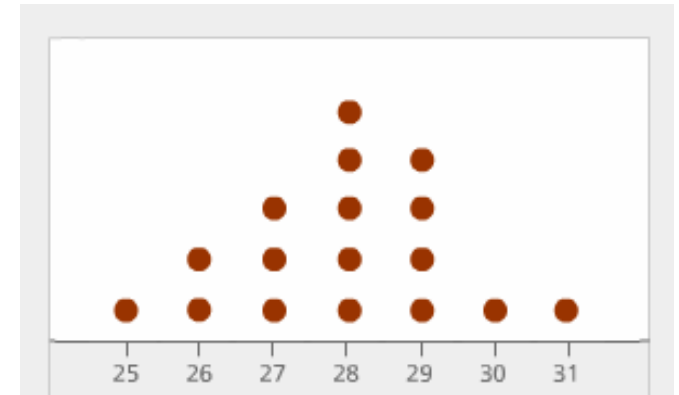
# circle graph



### Types of Shoes



# line plot



M&Ms per bag

# frequency table

Favorite Food	Tally	Frequency
Taco	/	7
Burger	/	9

Score	Frequency
Below 75	4
76 - 80	14
81 - 85	2
86 - 90	8
91 - 95	5
96 - 100	1

# experimental probability

Toss a coin

Heads	Tails
10	6

$$P(\text{heads}) = 5/8$$

$$P(\text{tails}) = 3/8$$

# theoretical probability

Toss a coin -

$$P(\text{head}) = \frac{1}{2}$$

$$P(\text{tail}) = \frac{1}{2}$$

Pick a marble

(2 blue, 3 red, 1 black)

$$P(\text{red}) = \frac{1}{2}$$

$$P(\text{white}) = 0$$

Roll a die -

$$P(>4) = \frac{1}{3}$$

$$P(\text{even}) = \frac{1}{2}$$

# sampling

Selecting students from P.E. classes

Selecting names from a hat

# event

Toss a coin

Roll a die

Pick a marble

Spin a spinner

Pick a letter

# random sample

students 2, 8, 12,  
15, and 22 from  
each math class

first 25 names of  
sixth graders  
drawn out of a hat

# population

all P.E. students

all Georgia students

all middle school students

