

4.2A Interpret the value of each place-value position as ten times the position to the right and as one-tenth of the value of the place to its left

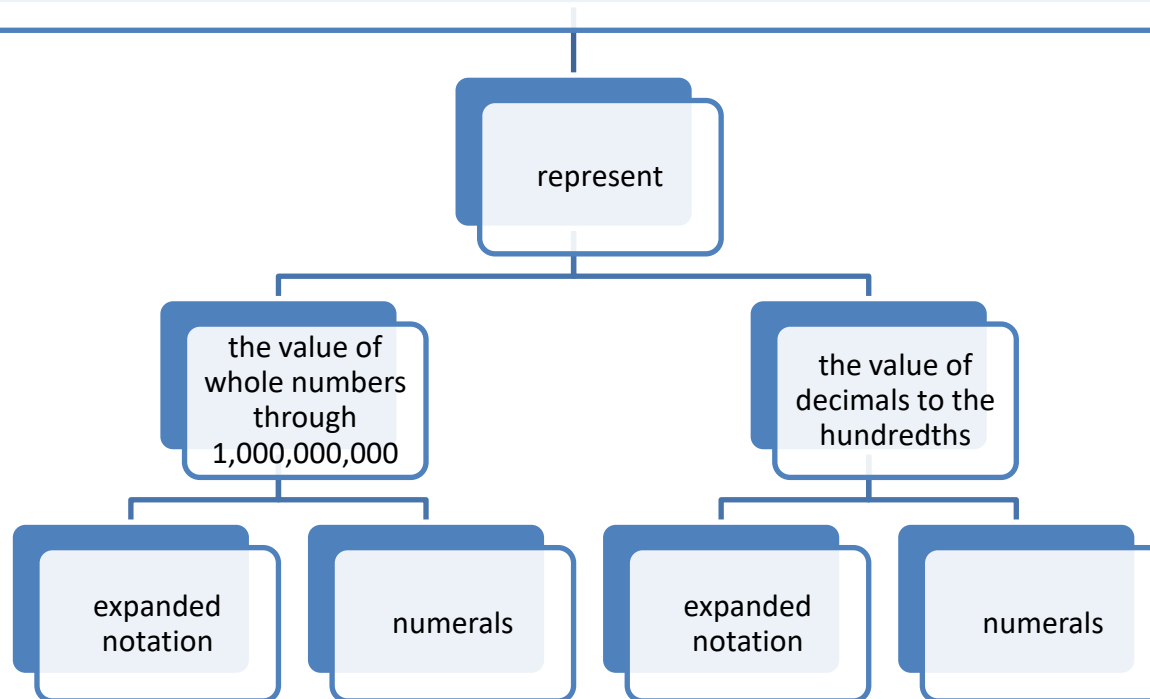
interpret

value of each
place value
position

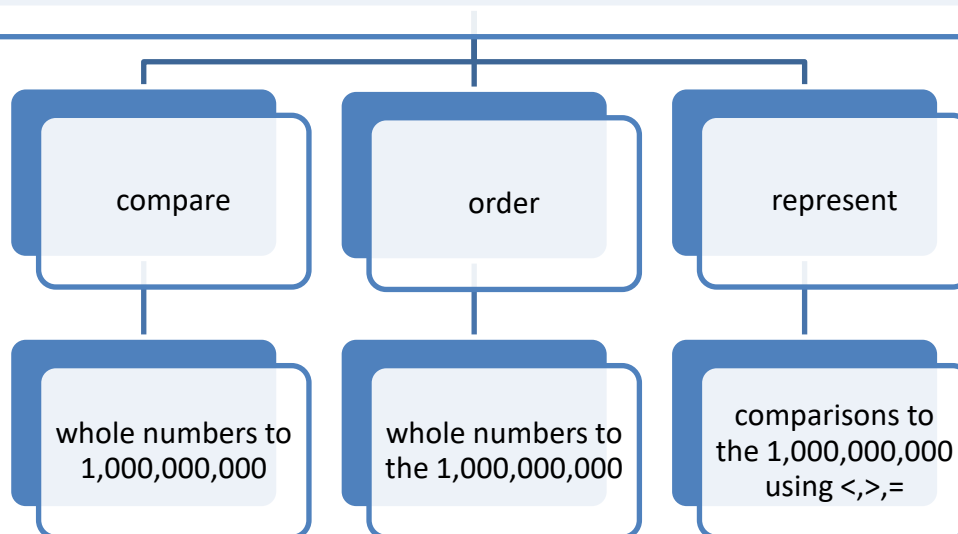
as tens times the
position to the right

as one tenth of the value
of the place to its left

4.2B represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals



4.2C compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$, $<$, $=$



4.2D round whole numbers to a given place value through the hundred thousands place

round

whole numbers

to a given place value through the hundred thousands place

4.2E represent decimals, including tenths and hundredths, using concrete and visual models and money

represent

decimals to tenths

decimals to hundredths

concrete models

visual models

money

concrete models

visual models

money

4.2F compare and order decimals using concrete and visual models to hundredths

compare

order

decimals to hundredths

decimals to hundredths

concrete models

visual models

concrete models

visual models

4.2G relate decimals to fractions
that name tenths

relate

decimals to
fractions that name
tenths

4.2H determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line

determine

corresponding
decimal

to the tenths
place of a
specified point on
a number line

to the hundredths
place of a
specified point on
a number line

4.3A represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including $a > b$

represent

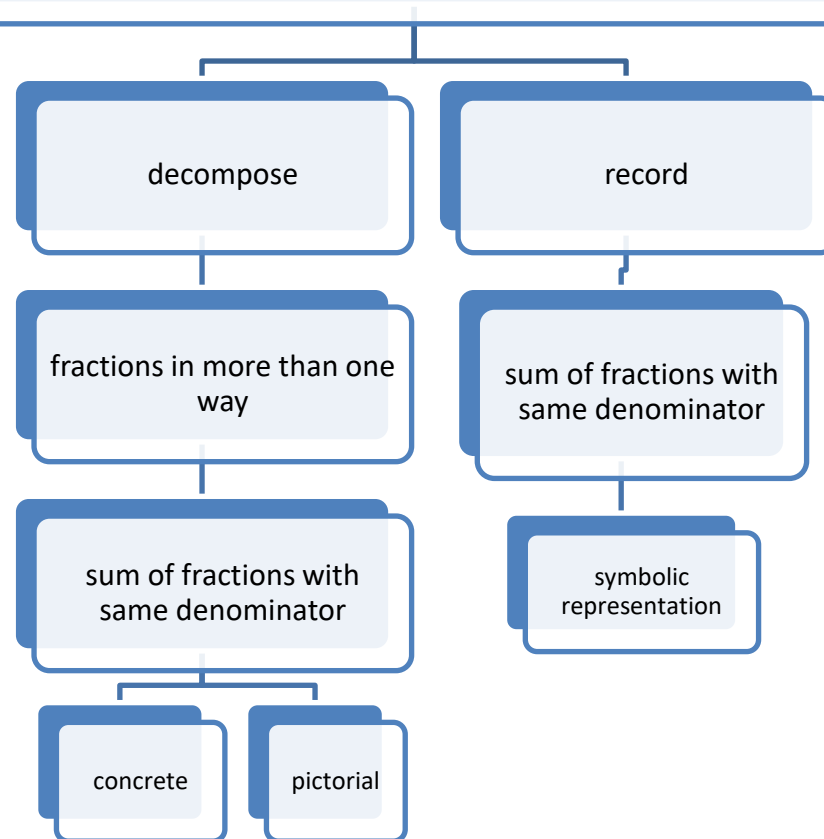
a fraction a/b as a sum of fractions $1/b$,
where a and b are whole numbers and $b > 0$

$a < b$

$a > b$

$a = b$

4.3B decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations



4.3C determine if two given fractions are equivalent using a variety of methods

determine

equivalence of two given fractions

variety of methods

4.3D compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$

compare

represent

two fractions

comparison of fractions

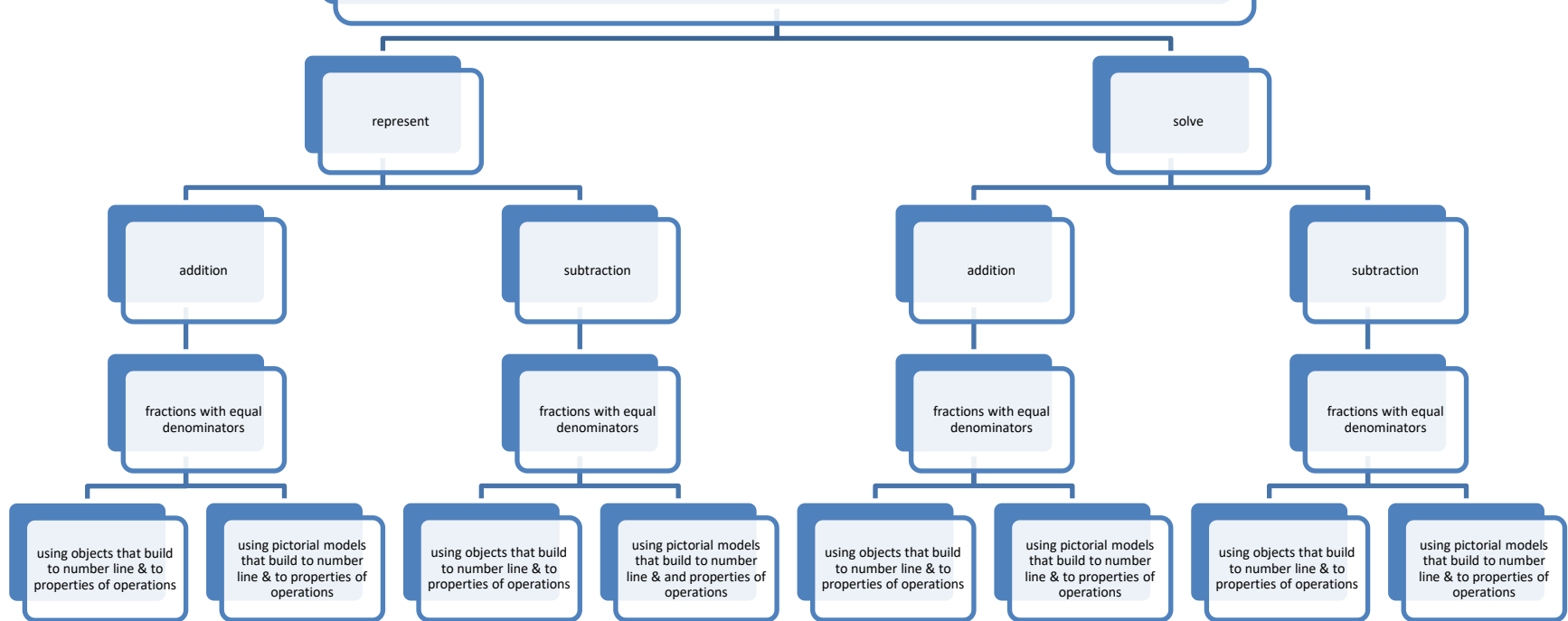
different numerators

different denominators

different numerators and denominators

symbols $>$, $=$, or $<$

4.3E represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations



4.3F evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1, and referring to the same whole

evaluate

reasonableness of sums

fractions

using benchmark fractions referring to the same whole number

0

$\frac{1}{4}$

$\frac{1}{2}$

$\frac{3}{4}$

1

reasonableness of differences

fractions

using benchmark fractions referring to the same whole number

0

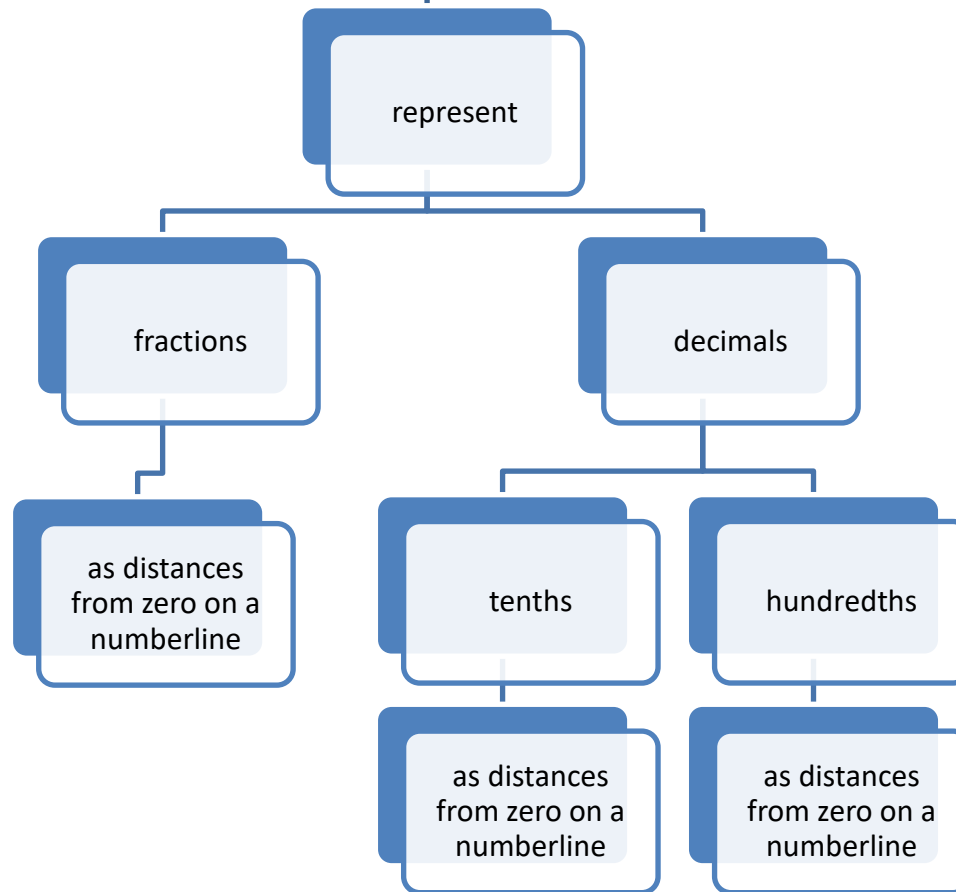
$\frac{1}{4}$

$\frac{1}{2}$

$\frac{3}{4}$

1

4.3G represent fractions and decimals to the tenths or hundredths as distances from zero on a numberline



4.4A add and subtract whole numbers and decimals to the hundredths place using the standard algorithm

add

subtract

whole numbers

decimals to the hundredths place

whole numbers

decimals to the hundredths place

using standard algorithm

using standard algorithm

using standard algorithm

using standard algorithm

4.4B determine products of a number and 10 or 100 using properties of operations and place value understanding

determine

products of a number and
ten

products of a number and
100

use properties of
operations

use place value
understanding

use properties of
operations

use place value
understanding

4.4C represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15×15

represent

product

2 digit numbers including
perfect squares through
 15×15

arrays

area models

equations

4.4D use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one digit number and to multiply a two digit number by a two-digit; strategies may include mental math, partial products, and the commutative, associative, and distributive properties

multiply up to a four-digit number by a one digit number

multiply a two digit number by a two digit number

Using strategies

Using algorithms, including standard algorithm

Using strategies

Using algorithms, including standard algorithm

mental math

partial product

commutative property

associative property

distributive property

mental math

partial product

commutative property

associative property

distributive property

4.4E represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations

represent

quotient

four-digit whole
number divided
by one-digit
whole number

arrays

area models

equations

4.4F use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor

divide

up to a four-digit
dividend by a one-digit
divisor

using strategies

using algorithms,
including the standard
algorithm

4.4G round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers

Estimate solutions involving whole numbers

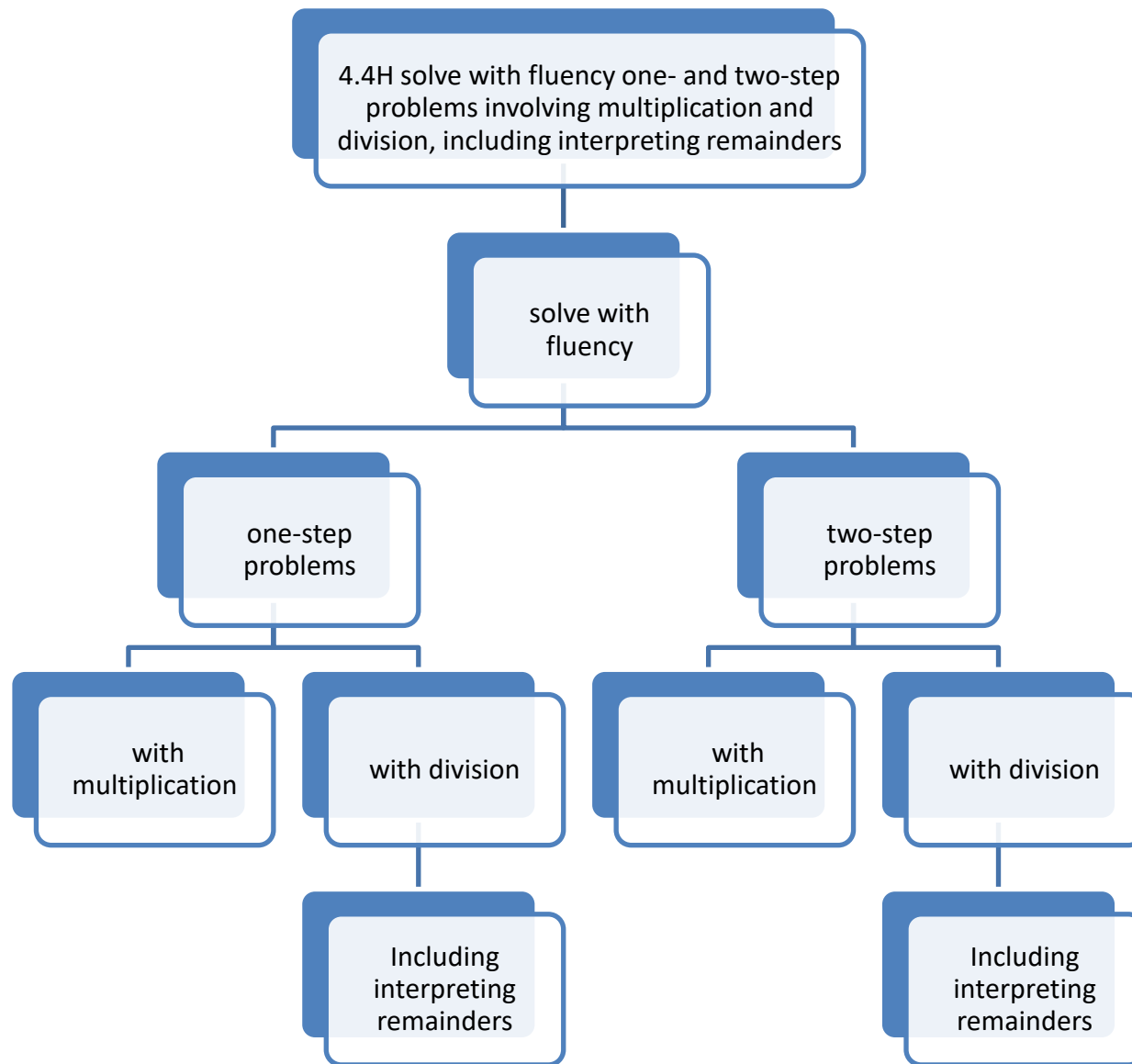
round

using compatible numbers

to nearest 10

to nearest 100

to nearest 1,000



4.5A represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for an unknown quantity

represent

multi-step problems involving addition with whole numbers

strip diagram with a letter standing for an unknown quantity

equations with a letter standing for an unknown quantity

multi-step problems involving subtraction with whole numbers

strip diagram with a letter standing for an unknown quantity

equations with a letter standing for an unknown quantity

multi-step problems involving multiplication with whole numbers

strip diagram with a letter standing for an unknown quantity

equations with a letter standing for an unknown quantity

multi-step problems involving division with whole numbers

strip diagram with a letter standing for an unknown quantity

equations with a letter standing for an unknown quantity

4.5B represent problems using an input - output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence

represent

generate

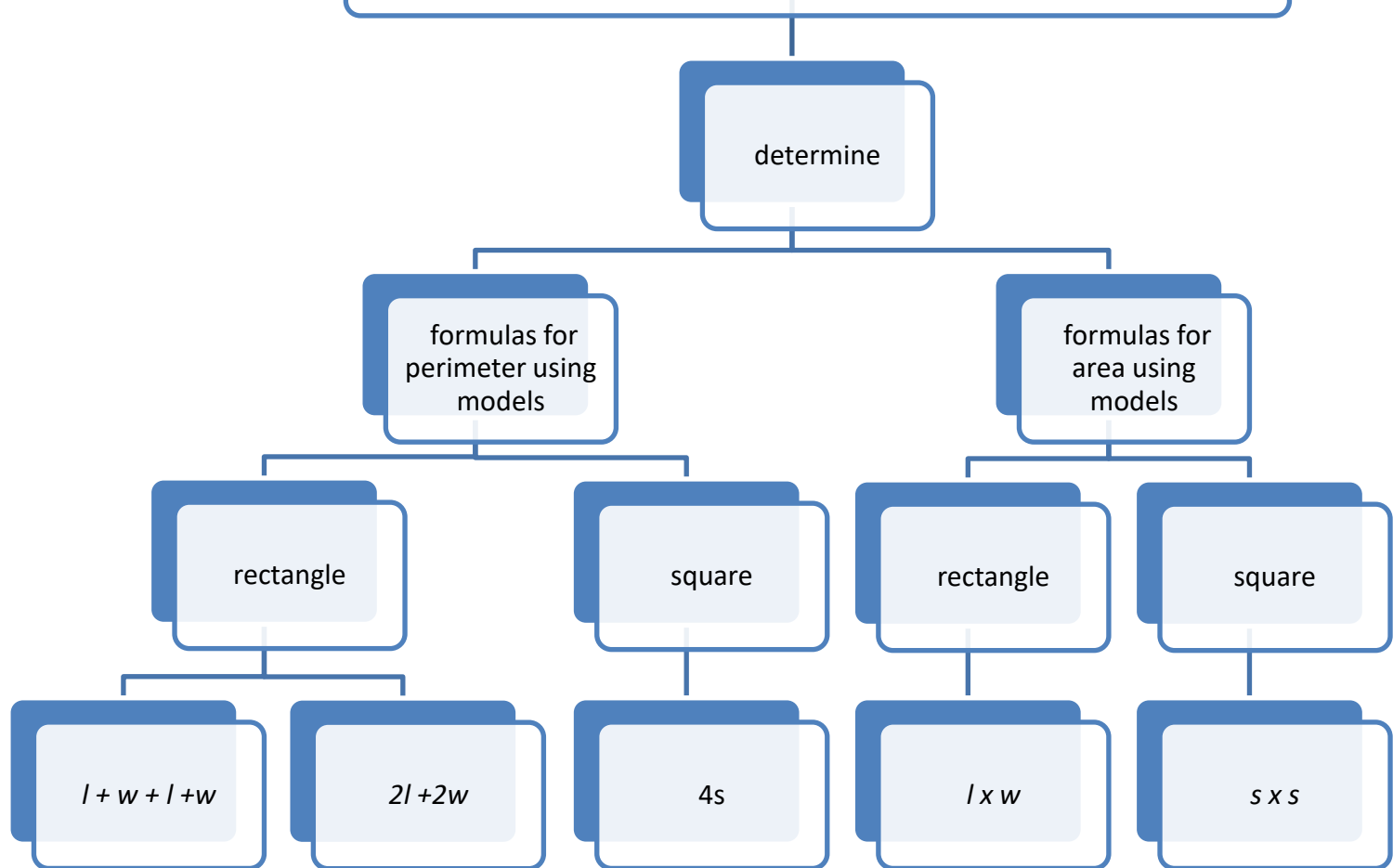
problems

a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence

input-output
table

numercial
expressions

4.5C use models to determine the formulas for perimeter of a rectangle ($l + w + l + w$ or $2l + 2w$), including the special form for perimeter of a square ($4s$) and the area of a rectangle ($l \times w$)



4.5D solve problems related to perimeter and area of rectangles where dimensions are whole numbers

solve problems

perimeter

area

rectangles with whole number dimensions

rectangles with whole number dimensions

4.6A identify points, lines, line segments, rays, angles, and perpendicular and parallel lines

identify

points

lines

line
segments

rays

angles

perpendicular
lines

parallel
lines

4.6B identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure

identify

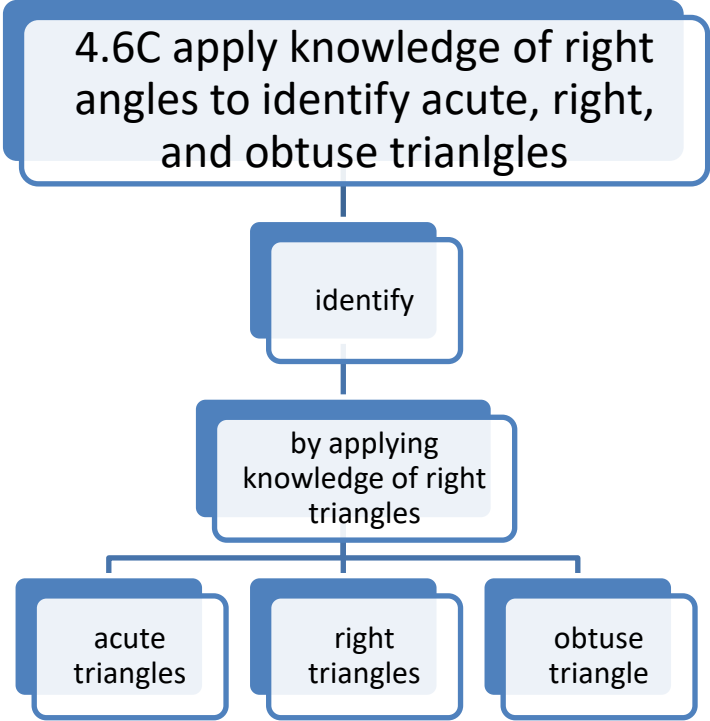
one line of symmetry for a two-dimensional figure

multiple lines of symmetry, if they exist, for a two-dimensional figure

draw

one line of symmetry for a two-dimensional figure

multiple lines of symmetry, if they exist, for a two-dimensional figure



4.6D classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size

classify

two-dimensional
figures

based on presence or absence of
parallel lines

based on presence or absence of
perpendicular lines

based on presence or absence of
angles of a specified size

4.7A illustrate the measure of an angle as part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle; angle measures are limited to whole numbers

illustrate

measure of an angle (in whole numbers) as part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle

4.7B illustrate degrees as the units used to measure an angle, where $\frac{1}{360}$ of any circle is 1 degree and an angle that "cuts" $\frac{n}{360}$ out of any circle whose center is at the angle's vertex has a measure of n degrees; angle measures are limited to whole numbers

illustrate

degrees

units used to
measure an
angle

4.7C determine the approximate measures of angles in degrees to the nearest whole number using a protractor

determine

approximate measures of
angles in degrees to the
nearest whole number

using a protractor

4.7D draw an angle with a given measure

draw

an angle

with a given
measure

4.7E determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angles measures

determine

measure of an unknown angle formed by two non-overlapping adjacent angles

given one angle measure

given both angle measures

4.8A identify relative sizes of measurement units within the customary and metric systems

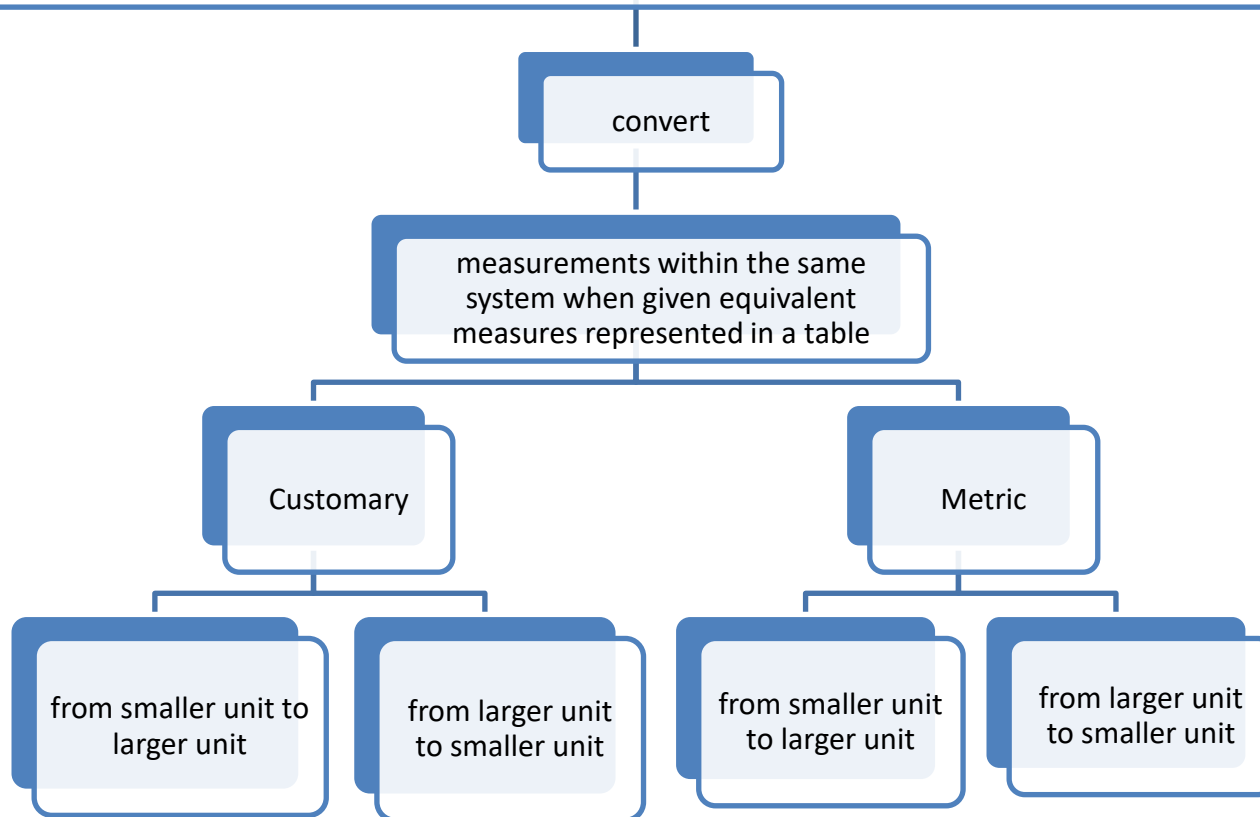
identify

relative sizes of
measurement
units

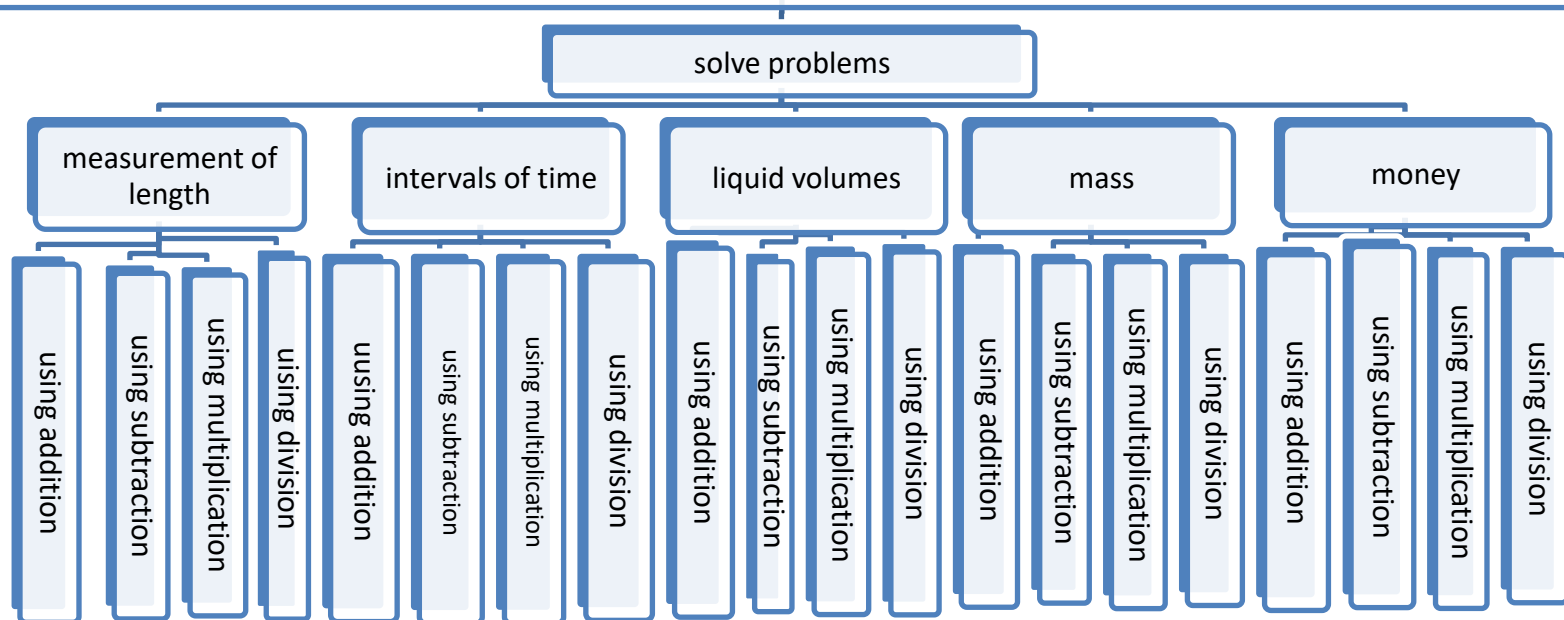
customary
systems

metric system

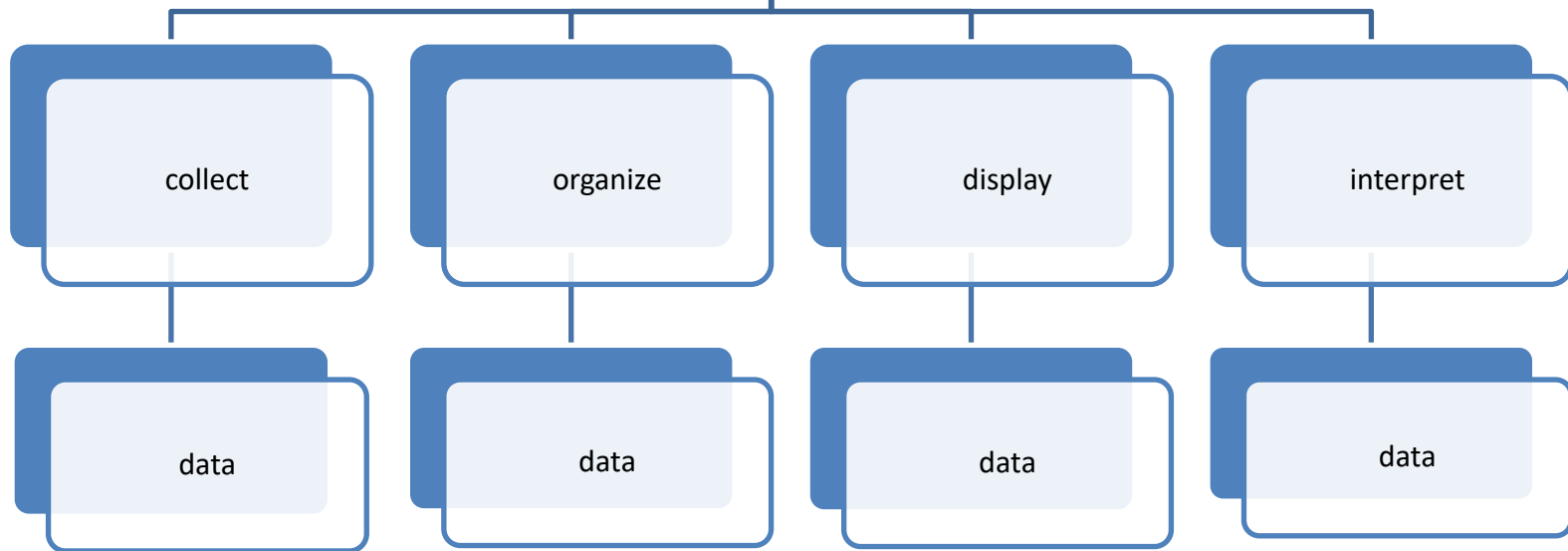
4.8B convert measurements within the same system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table



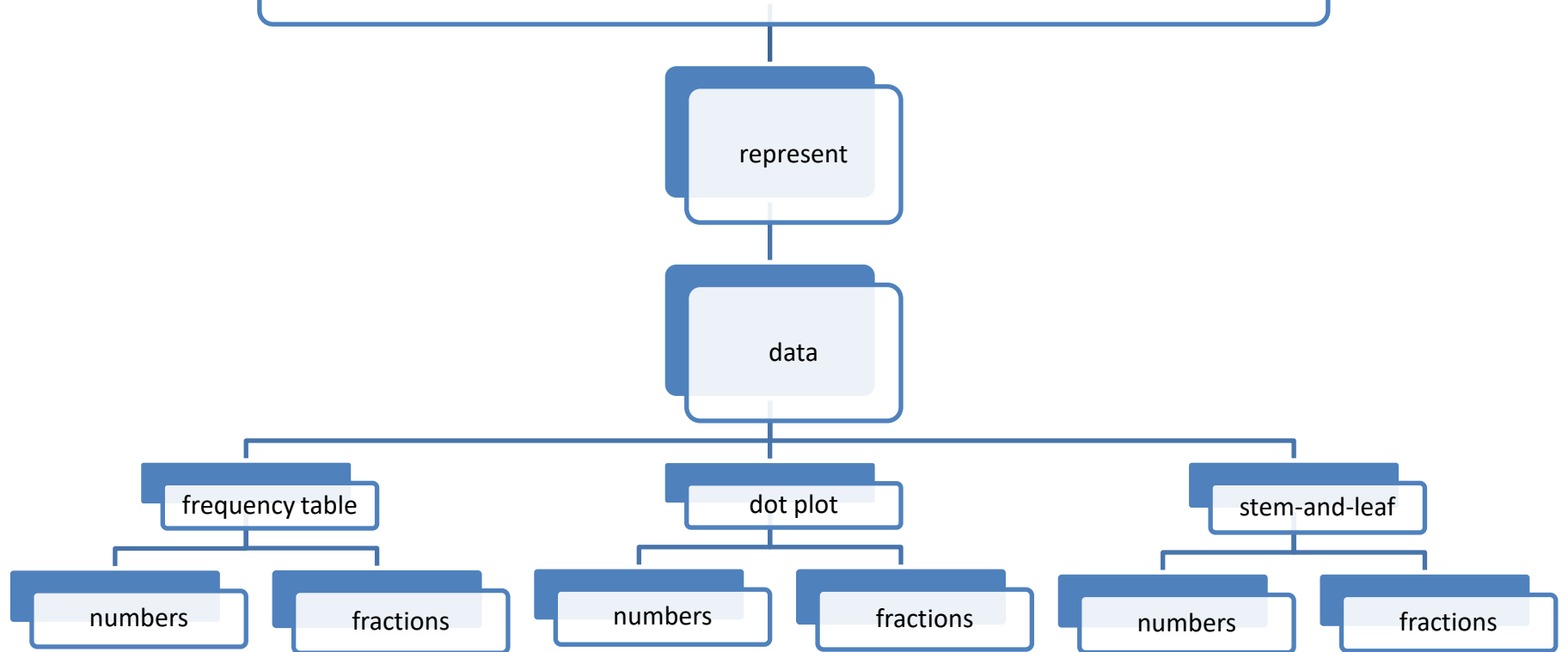
4.8C solve problems that deal with measurement of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate



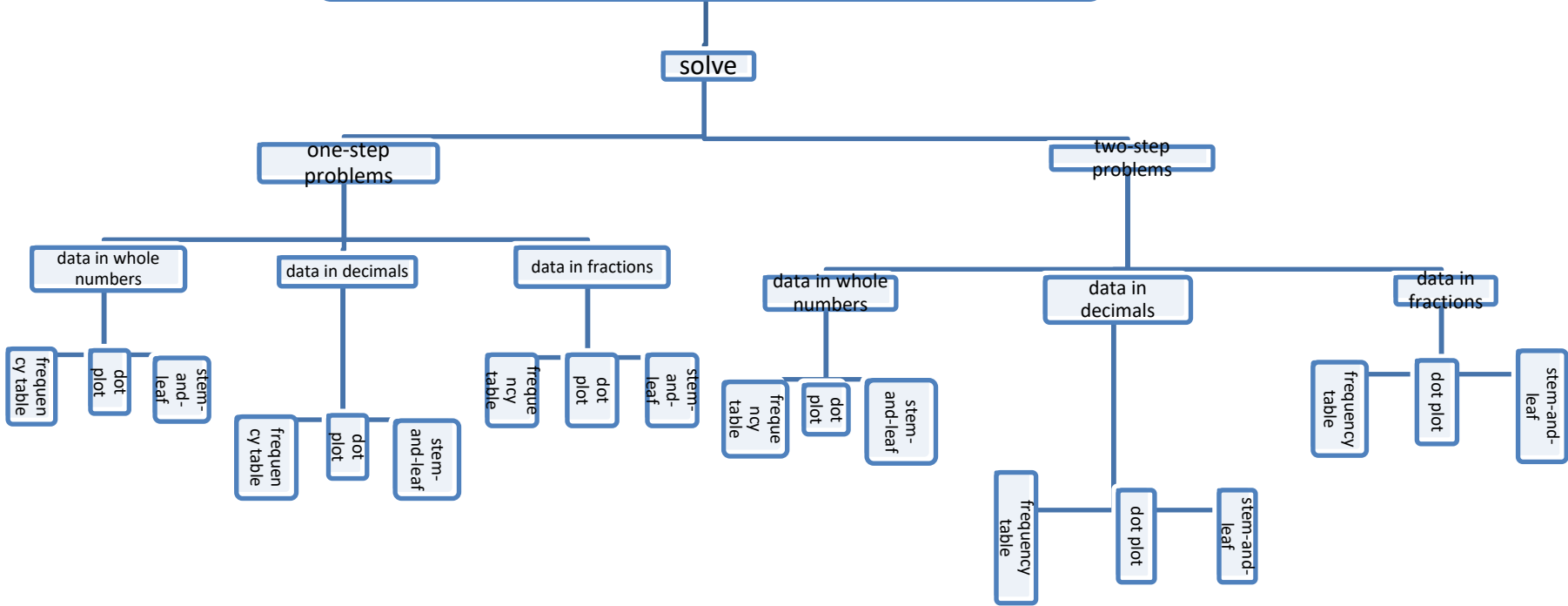
4.9 collect, organize, display, and interpret data



4.9A represent data on a frequency table, dot plot, or stem-and-leaf plot marked with numbers and fractions



4.9B solve one-and two-step problems using data in whole number, decimal and fraction form in a frequency table, dot plot, or stem-and-leaf plot.



4.10A distinguish between
fixed and variable expenses

distinguish
between

fixed and
variable
expenses

4.10B calculate profit
in a given situation

calculate

profit

4.10C compare the advantages and disadvantages of various savings options

compare

advantages

disadvantages

various savings options

various savings options

4.10D describe how to allocate a weekly allowance among spending; saving, including for college; sharing

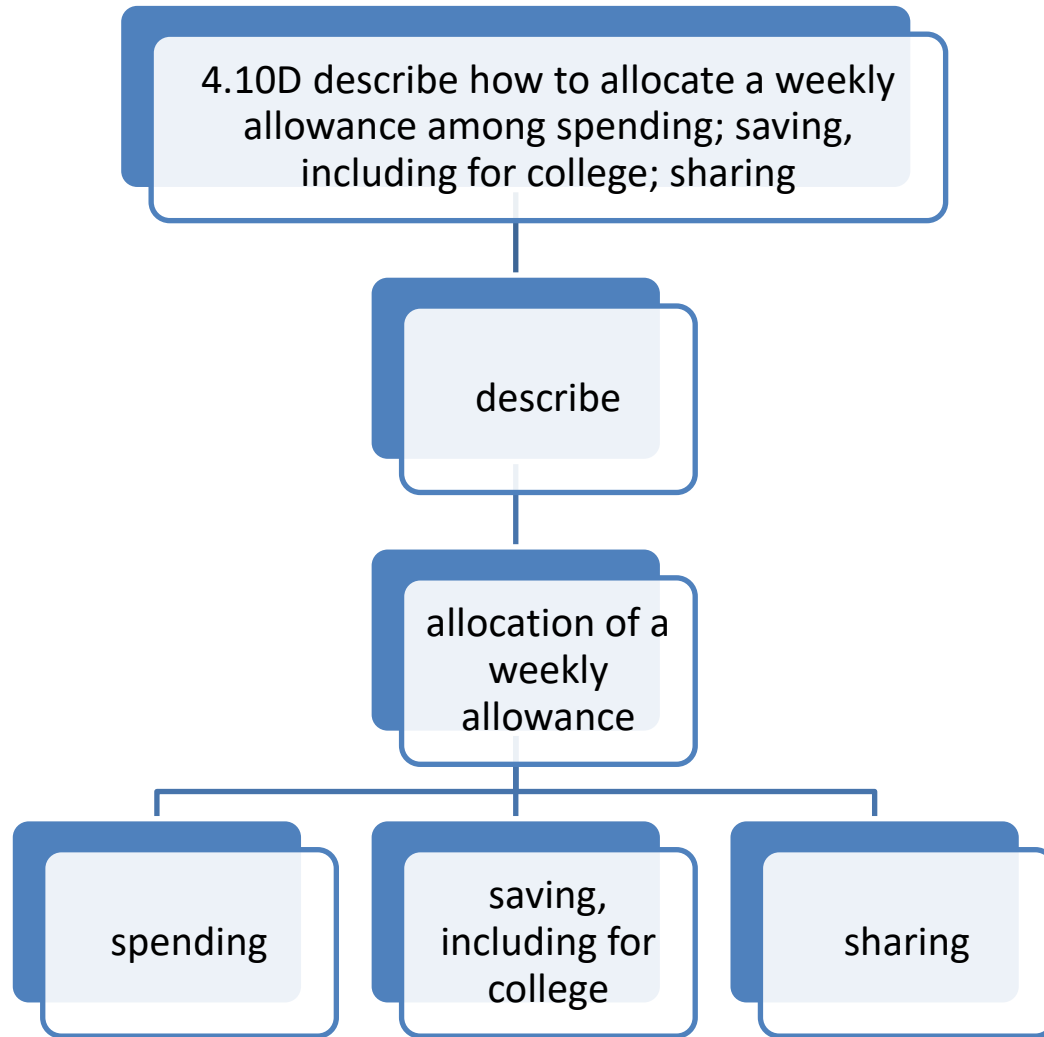
describe

allocation of a weekly allowance

spending

saving,
including for college

sharing



4.10E describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending.

describe

basic purpose of
financial
institutions

keeping money
safe

borrowing
money

lending

