Contents

TEACHER GUIDE

STUDENT HANDOUTS

Number and Operations

Algebra

Geometry

Contents

NAME: _____

1+2 Task Sheet

Task Sheet 15

15a) The following planets are ranked in order according to approximate diameter from the largest to the smallest. Place the correct diameter beside each planet.

Jupiter	
Saturn	
Uranus	
Neptune	
Earth	
Venus	
Mars	
Mercury	

3 045	88 856	7 519	7 954	4 225	31 752	77 671	30 758	**miles**
4 900	143 000	12 100	12 800	6 800	51 100	125 000	49 500	**kilometers**

b) What is the difference in kilometers between the largest and smallest planets?

i) 130 700 (81 213 miles) ii) 138 100 (85 811 miles)
iii) 125 650 (78 075 miles) iv) 14 700 (9 134 miles)

c) The known moons of the following planets total 164: Saturn, 61; Jupiter 63; Uranus, 27; Neptune ___.

i) How many known moons does Neptune have?

Answer = _____

ii) About what percentage of the total is this?

Answer = _____

Explore With Technology

Use the automatic constant on your calculator to make the calculator count by 5's to 1000. How many seconds does it take your calculator to perform this operation?

Can you calculate how long it would take your calculator to count to one million in this manner?

1+2 Task Sheet

NAME: _____

Task Sheet 10

What's the Meaning of this?

10a) If Joanne can buy C chocolate bars at .80¢ each and B butter tarts at .50¢ each, what is the meaning of:
(Show your work.)

i) C + B

ii) 25C

iii) 20B

iv) 25C + 20B

b) If Joanne buys D donuts at .40¢ each and P potato chips at .75¢ per bag, what is the meaning of:

i) 2D + 4P

ii) 17P

iii) D/2

iv) 12D + 10P

Reflection

If x = 1.20 and y = 1.40, predict which of the following equations would equal the highest and lowest values.

i) 5x + 5y ii) 10x iii) 10y iv) xy

Now, solve each equation to see if you were right.

NAME: _____

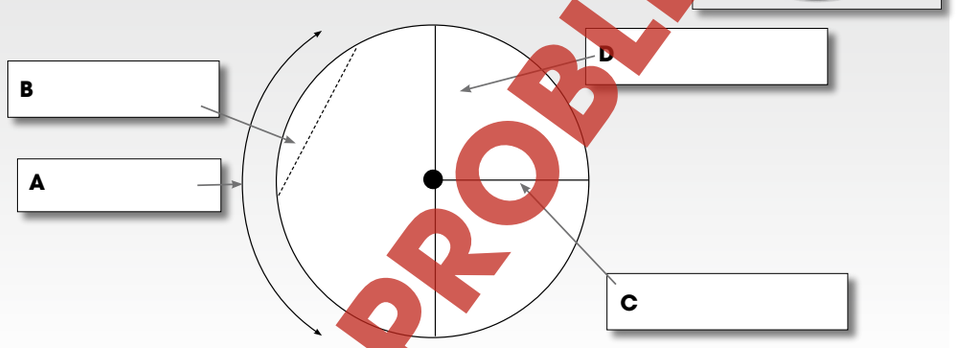
1+2 Task Sheet

Task Sheet 7

Parts of a Circle

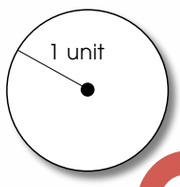
7) Label each part of the circle.

- **Circumference:** distance around the outside of a circle
- **Diameter:** distance across the circle through the center point
- **Radius:** half of the diameter
- **Chord:** a line segment that joins two parts of the circumference



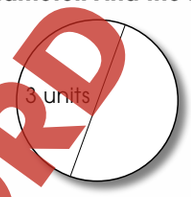
The radius is ½ of the diameter. Find the radius and diameter of each circle below.

e)



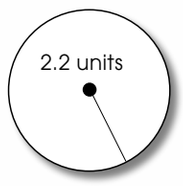
Radius: _____units
Diameter: _____units

f)



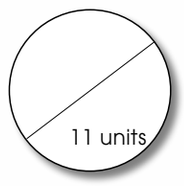
Radius: _____units
Diameter: _____units

g)



Radius: _____units
Diameter: _____units

h)



Radius: _____units
Diameter: _____units

Reflection

Explain how all diameters are chords, but not all chords are diameters.

_____

_____

1+2 Task Sheet

NAME: _____

Task Sheet 4

A Protracted Arrangement

4) For the following activity, you are going to need a protractor. Then, look at the clues in each box. Draw the angle that is being described with the clue. Then, write how many degrees each angle will have.

Angle One: Draw an angle that equals one-half a right angle.

How many degrees is the angle? _____

Angle Two: Draw a supplementary angle to an angle that is 100°.

How many degrees is the angle? _____

Angle Three: Draw a complementary angle to an angle that is 60°.

How many degrees is the angle? _____

Angle Four: Draw an angle that is one-third the size of a 45° angle.

How many degrees is the angle? _____

Angle Five: Draw an angle that equals one and one-half right angles.

How many degrees is the angle? _____

Angle Six: Draw an angle that is 30° less than a straight angle.

How many degrees is the angle? _____

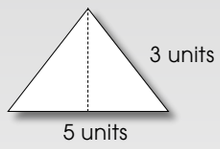
NAME: _____

Drill Sheet

Drill Sheet 2

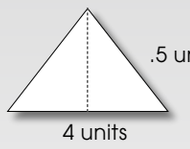
Find the area of each triangle below.

a)



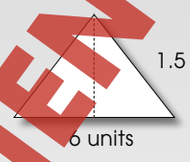
_____ square units

b)



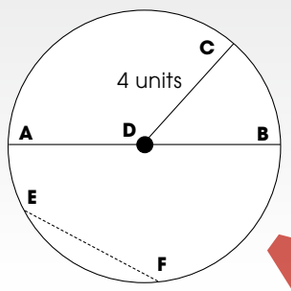
_____ square units

c)



_____ square units

Use the circle to answer the questions.



d) Which line segment is the diameter? _____

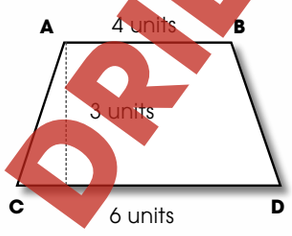
e) Which line segment is the chord? _____

f) Which line segment is the radius? _____

g) What is the area of the circle? _____

h) What is the diameter of the circle? _____

Use the shape below to answer the questions.



i) What is the name of this shape? _____

j) Which two lines are parallel? _____

k) What is the height of the trapezoid? _____

l) What is the area of the trapezoid? _____

NAME: _____

Drill Sheet

Drill Sheet 2

An outlier is a number that is significantly different from the rest of the grouping of numbers.

The following goals were scored at a basketball game.

The goals were scored at 1:56, 2:18, 2:35, 3:19, 4:12, 4:48, 1:56, 3:22, and 12:23.

a) What is the mode?

b) What is the median?

c) What is the range?

d) What is the mean?

e) Which time is the outlier?

f) Calculate the mean, median, range, and mode without the outlier.

Mean

Median

Mode

Range

g) Explain how excluding the outlier changes the data. Is it a significant change. Why or why not?

h) How can you explain the outlier?

NAME: _____

Review Sheet

Review B

Use the circle graph to answer the questions below.

a) What does the information on the graph provide?

b) What information is missing on the graph?

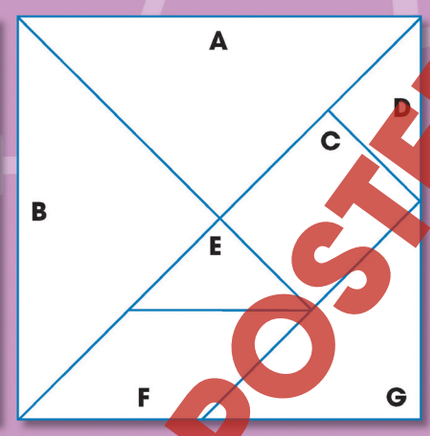
c) Is the information provided on the graph correct? Explain.

d) Recreate the graph on a separate piece of paper to make it more informative.

Tangrams

a) Label the shape of each tangram piece.

A	
B	
C	
D	
E	
F	
G	



b) Cut apart the seven tangram pieces. Use two or more pieces to create the following shapes. Indicate the individual shapes/pieces used to create each shape.

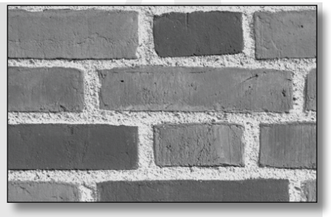
Trapezoid	
Parallelogram	
Rectangle	
Square	
Triangle	

NAME: _____

1 + 2 Task Sheet

Task Sheet 3

Areas of Squares and Rectangles

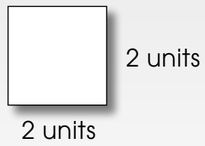


3) To find the area of a square or rectangle, multiply its length by its width. The answer will be in square units.

Area = length x width

Find the area of each square and rectangle.

a)

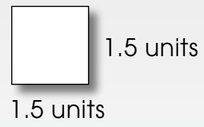


_____ square units

b)

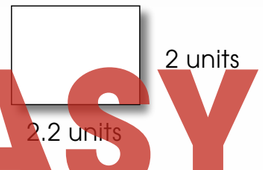
_____ square units

c)



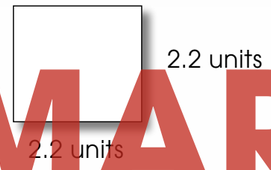
_____ square units

d)



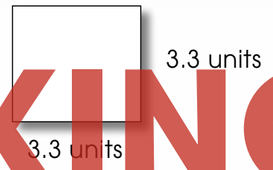
_____ square units

e)



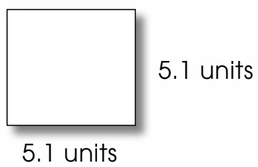
_____ square units

f)



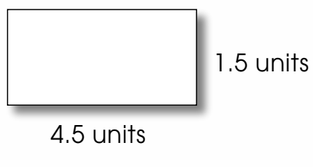
_____ square units

g)



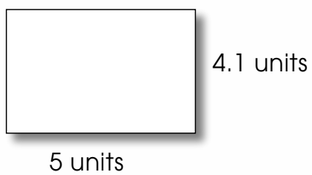
_____ square units

h)



_____ square units

i)



_____ square units

EASY MARKING ANSWER KEY

3.

a) 4 square units

b) 4.5 square units

c) 2.25 square units

d) 4.4 square units

e) 4.84 square units

f) 10.89 square units

g) 26.01 square units

h) 6.75 square units

i) 20.5 square units

4.

a) 4.5 square units
b) 8 square units
c) 15.5 square units

d) 25.2 square units
e) 7.2 square units
f) 1.1 square units

g) d) with 25.2 square units

h) f) with 1.1 square units

5.

a) isosceles, right, 90 degrees

b) isosceles, right, 45 degrees

c) equilateral, acute, 60 degrees

d) scalene, acute, 85 degrees

e) scalene, obtuse, 115 degrees

f) isosceles, acute, 75 degrees

6.

a) 15 square units

b) 22.5 square units

c) 16.5 square units

d) 21 square units

e) 21 square units

f) 10 square units

g) 6 square units

h) 20 square units

i) 7.5 square units

7.

a) Circumference

b) Chord

c) Radius

d) Diameter

e) radius = 1, diameter = 2

f) radius = 1.5, diameter = 3

g) radius = 2.2, diameter = 4.4

h) radius = 5.5, diameter = 11

EZ