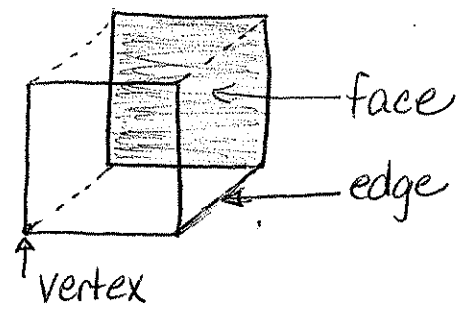



Math CHAPTER 8 USING GEOMETRY

Lesson 1 Solids

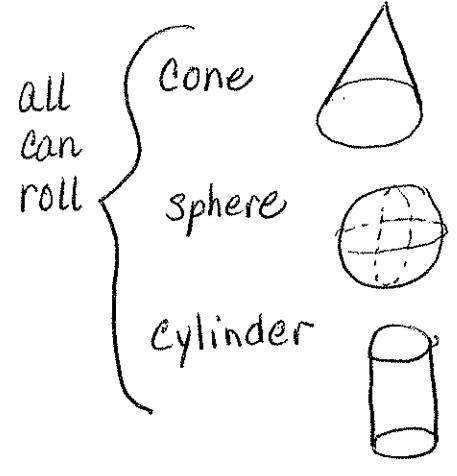
Vocabulary - Solid Figures
 face
 edge
 vertex (vertices)



cube  8 vertices
 6 faces
 12 edges

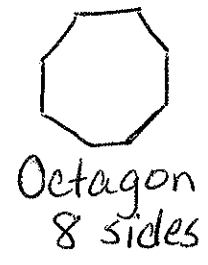
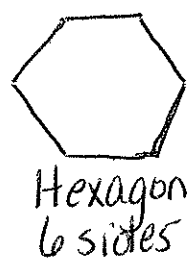
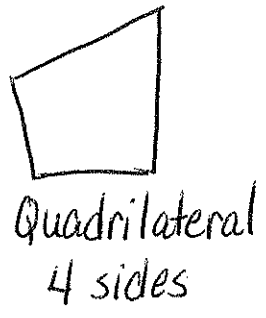
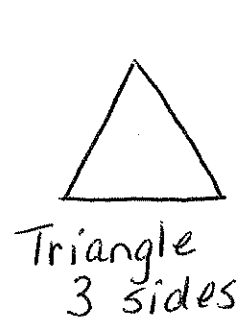
rectangular prism  8 vertices
 6 faces
 12 edges

pyramid  5 vertices
 5 faces
 8 edges

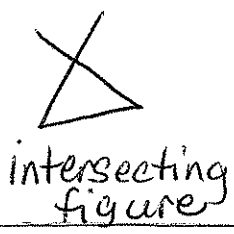
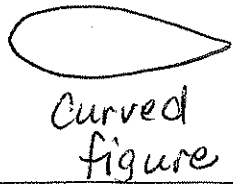
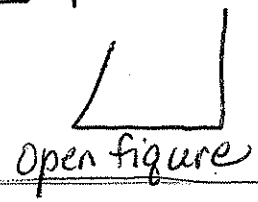


Lesson 2 Polygons

Vocabulary - plane figure - the face of a solid
 polygon

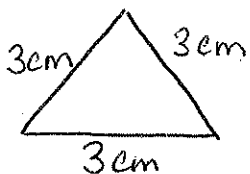


Not polygons

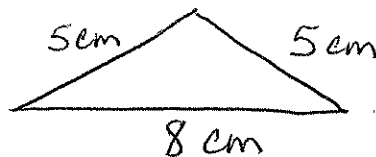


Lesson 3 Triangles

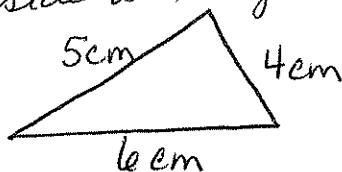
Equilateral Triangle
all sides are the same length



Isosceles Triangle
at least 2 sides are the same length.



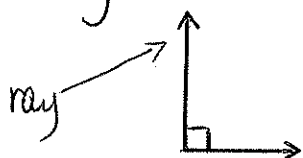
Scalene Triangle
No sides are the same each side is single.



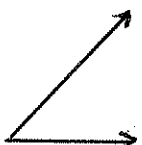
Lesson 4 Triangles and Angles

Vocabulary - angle
ray

You can name an angle by the size of its opening.



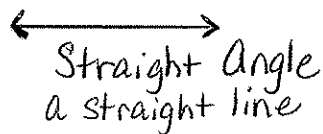
Right angle
a square corner



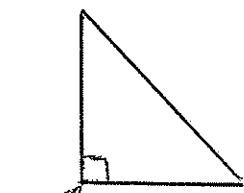
Acute Angle
less than a right angle



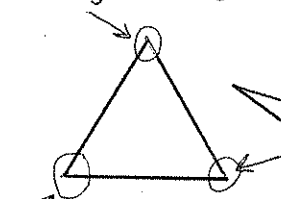
Obtuse angle
greater than a right angle
less than a straight angle



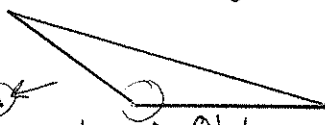
Straight Angle
a straight line



Right triangle



Acute triangle



Obtuse angle

Lesson 5,6 Congruent Figures and Motions & Similar Figures

Vocabulary - congruent -

flip -

turn -

slide -



similar
same shape
not same size



Congruent
same size and shape



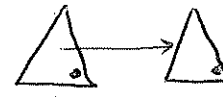
Not congruent
not same size and shape



flip = reflection

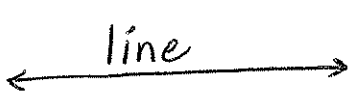


turn = rotation



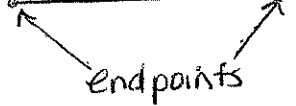
slide = translation

Lesson 7 Lines and Line Segments

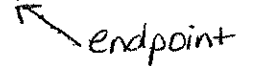


line

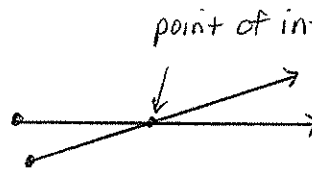
line segment



ray

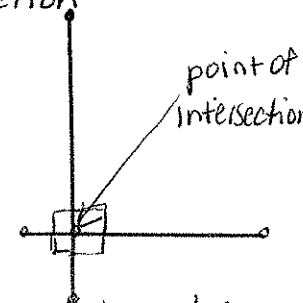


Parallel lines never cross or intersect.



point of intersection

Intersecting rays



point of intersection

Perpendicular line segments

Lesson 8 Quadrilaterals



Parallelogram
two pairs of opposite parallel sides



Square

all sides same length
4 right angles



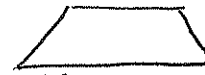
Rectangle

Opposite sides are parallel and same length
4 right angles



Rhombus

Two pairs of parallel sides
All sides are same length



Trapezoid

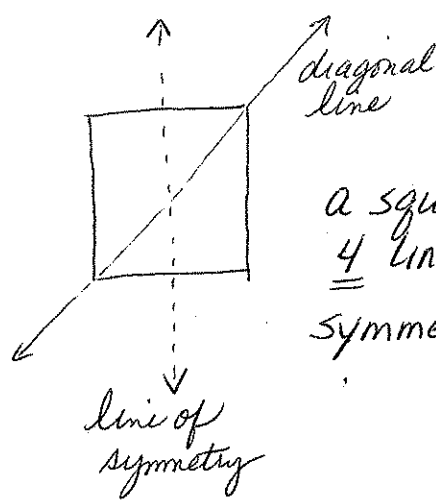
only one pair of parallel sides

Lesson 9

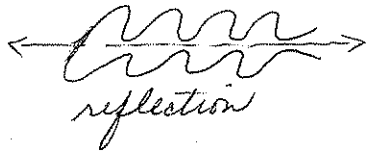
Symmetry

Vocabulary

line of symmetry
diagonal



a square has 4 lines of symmetry



Lesson 10

Problem Solving Board

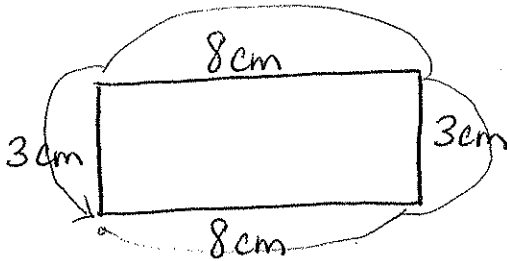
Lesson 11

Perimeter

perimeter

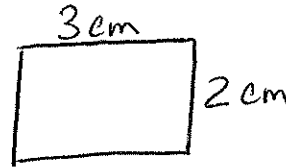
The distance AROUND a figure

all the way around the outside



$$8 + 3 + 8 + 3 = \text{Perimeter}$$

$$8 + 3 + 8 + 3 = 22 \text{ cm}$$



$$P = 2 \times \text{length} + 2 \times \text{width}$$

for quadrilaterals

Lesson 12

Area

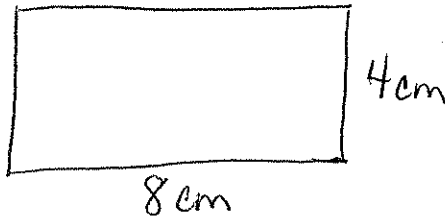
sqArea



The area is the number of square units needed to cover a figure

$$A = L \times W$$


$$A = \text{Length} \times \text{width}$$



Square cm
= sq. cm²
or cm²

$$A = 8 \times 4 = 32 \text{ square cm.}$$

Lesson 13 Volume

The volume of a solid is the number of cubic units it contains. This  is one cubic unit.

Volume = length \times width \times height

$$V = l \times w \times h$$

$$V = 3 \text{ in.} \times 2 \text{ in.} \times 2 \text{ in.}$$

$$V = 12 \text{ cubic inches}$$

$$\text{Cubic inches} = \text{in.}^3$$

