

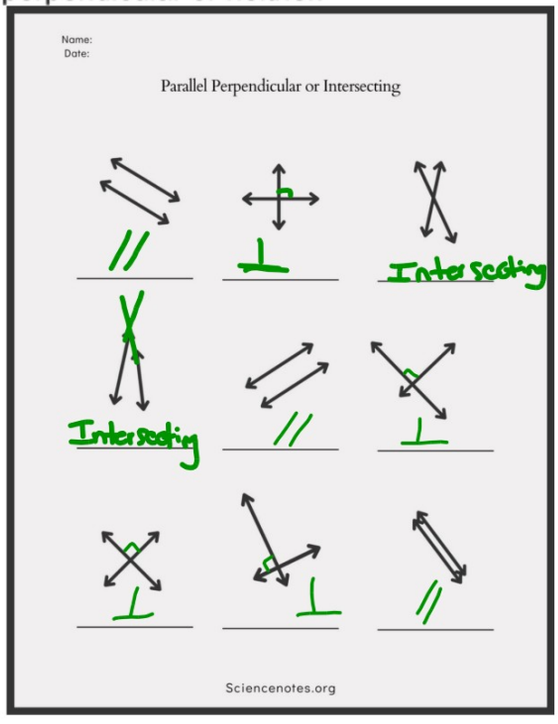
Chapter 7

perpendicular ⊥

OLD Gr 6 Textbook Lesson 4 parallel //

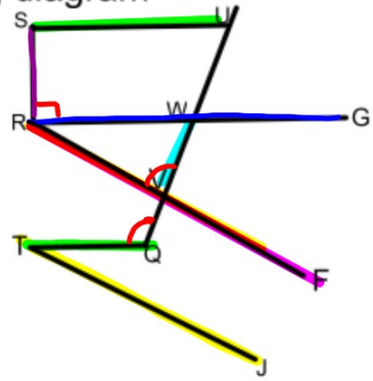
Nov. 13

1) Identify if the lines are parallel or perpendicular or neither.



2)Which statement is not true for the following diagram

2)



i) Line SR is perpendicular to RG True

ii) Line SU is parallel to TQ True

False iii) Line WV is perpendicular to RF False

iv) Line RF is parallel to TJ True

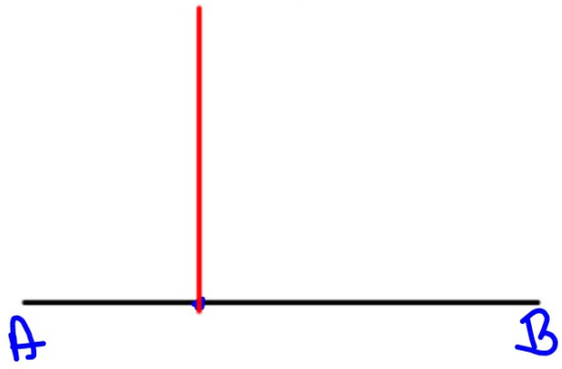
pg 305

1 a) perpendicular, form a 90° angle

b) perpendicular

c) not perpendicular

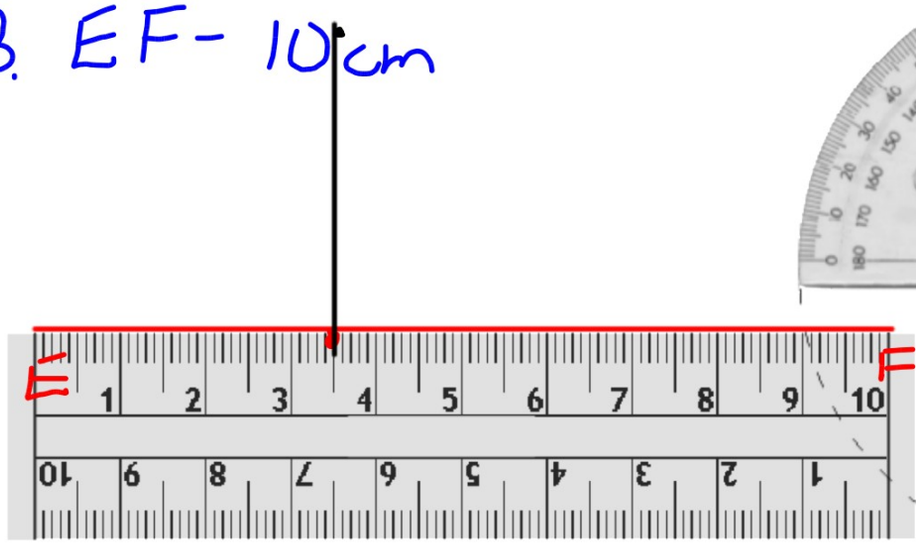
2.

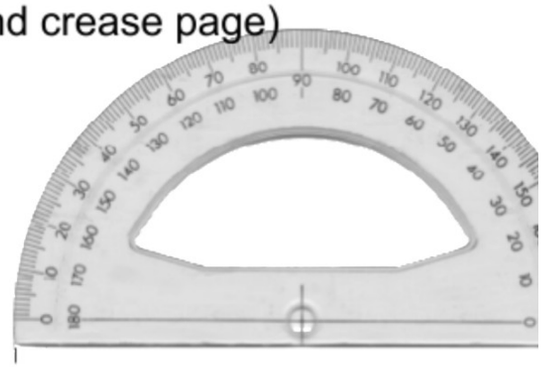


b) Use folding paper.

2) b) Draw a line CD 8 cm (Fold c onto D and crease page)

3. EF - 10 cm

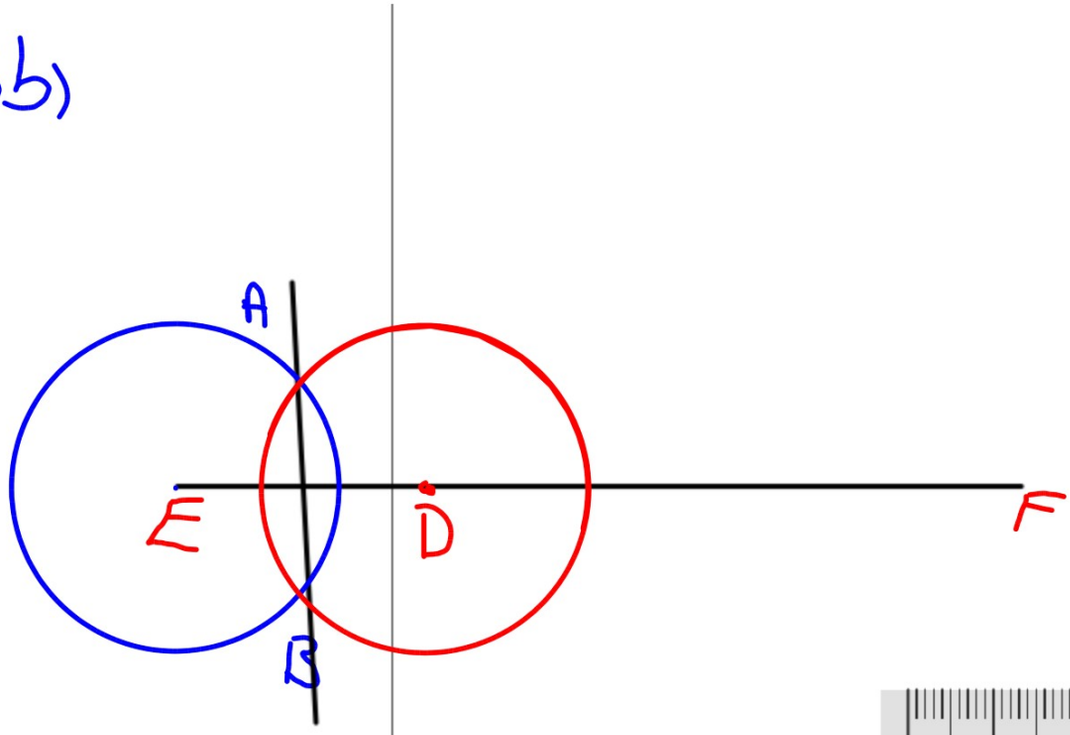


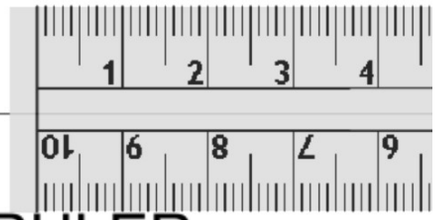


RULER & PROTRACTOR

May 20-10:43 AM

3b)





COMPASS & RULER

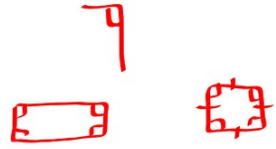
May 14-9:44 AM

4. Perpendicular Lines

*corner of door

*lines on ceiling or floor

*corner of the board



4 5

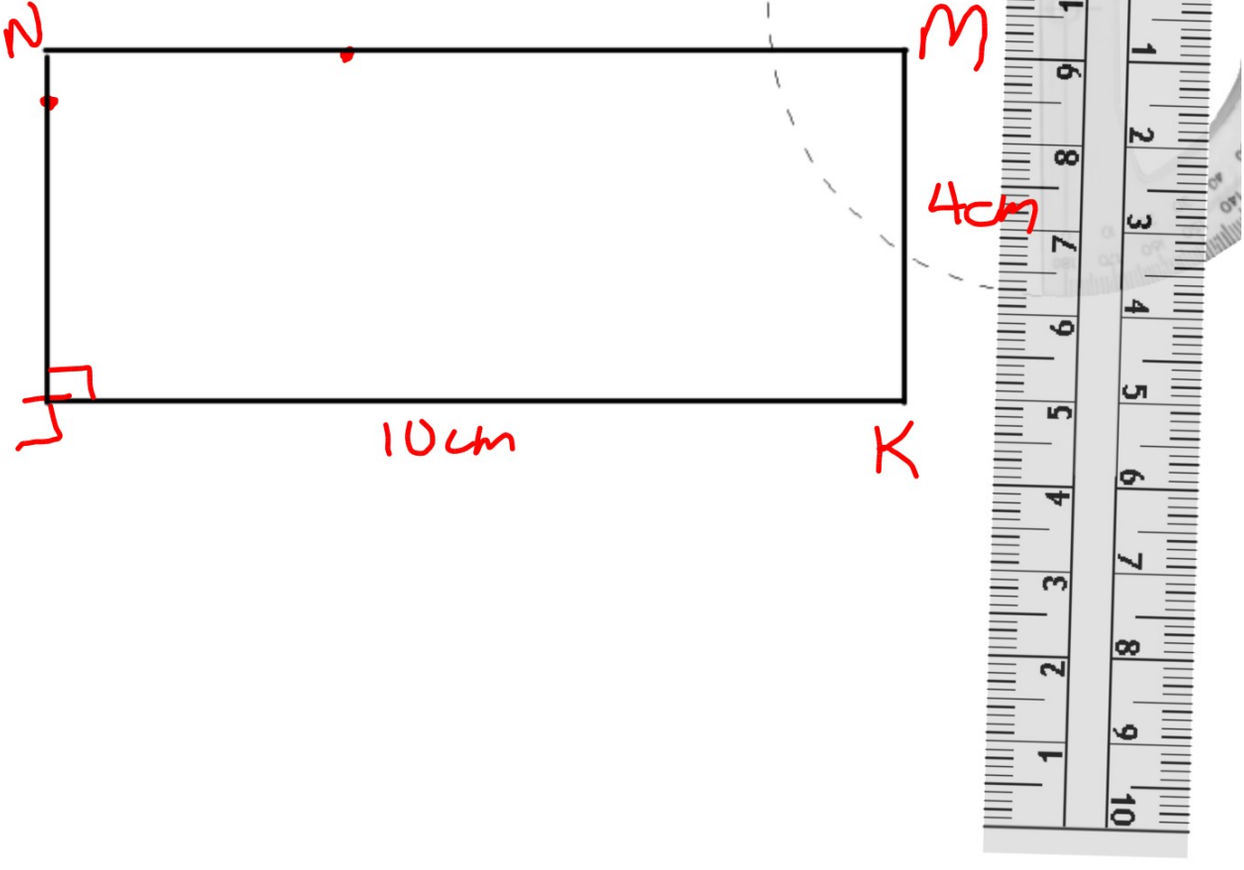
5. AB ⊥ LB FH ⊥ GJ

AB ⊥ EA

LR ⊥ MB

FR ⊥ LM

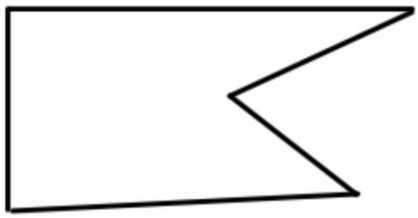
6.



Polygons

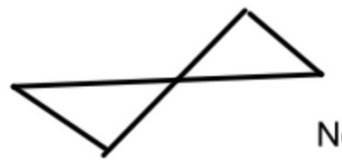
A polygon is a closed shape with sides that are straight line segments. EXACTLY 2 sides meet at a vertex. The sides only intersect at that vertex.

This is a Polygon





These shapes are non-polygons

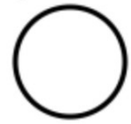


more than 2 sides meet a center vertex

Cross over



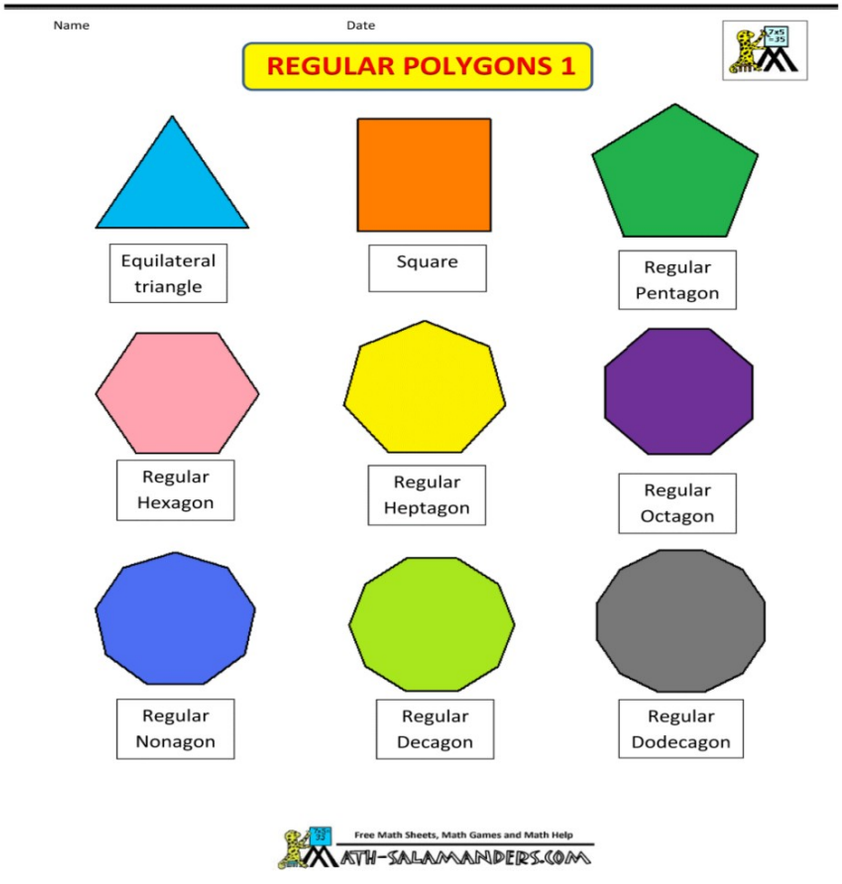
Not Closed



Not made with straight lines

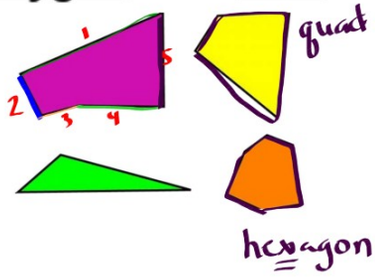
Apr 8-3:45 PM

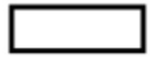
A **regular polygon** has all equal sides and all equal angles
-Has lines of symmetries



Apr 8-3:58 PM

A **irregular polygon** does **NOT** have all equal sides and all equal angles



Rectangles  Study

Rhombus 

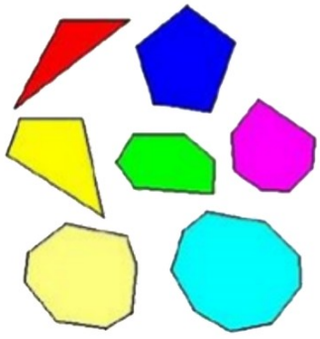
A **convex polygon** has all interior angles less than 180°



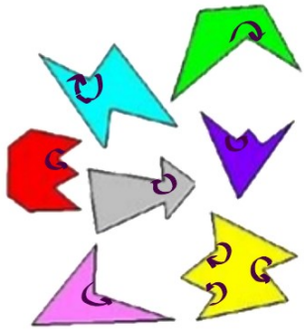
A **concave polygon** has at least 1 interior angle greater than 180°

reflex angle is inside shape

Convex Polygons



Concave Polygons



Apr 8-3:58 PM

Class/Homework

old gr 6 textbook (copy on next slides)

Page 216-218 #1, 2, 3,4, 5, 6

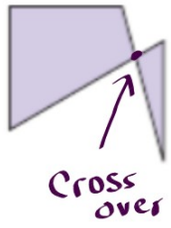
Don't need a copy just trace NEATLY

Apr 4-10:35 AM

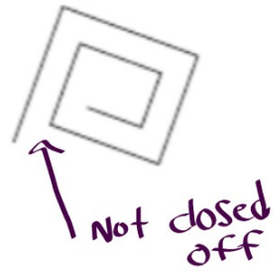
Practice

1. Explain why each shape is not a polygon.

a)

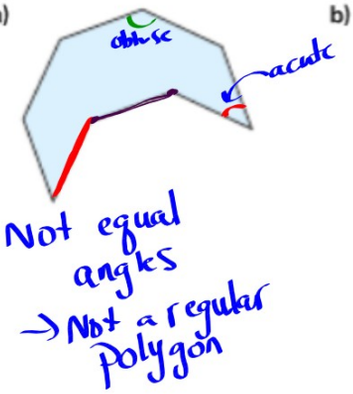


b)



2. Is each polygon regular? How do you know?

a)



b)



c)



3. A cell in a honeycomb approximates a regular hexagon.
   a) Suppose ∠A = 120°. What are the measures of angles B, C, D, E, and F?
   b) Suppose side AB has length 9 cm. What are the lengths of sides BC, CD, DE, EF, and FA?



Apr 8-10:18 AM

4. Your teacher will give you a large copy of these shapes.

a) Sort these shapes into sets of polygons and non-polygons. Explain how you decided where to place each shape.



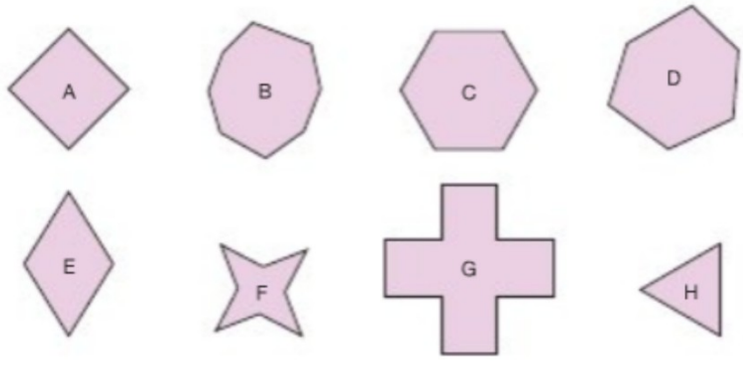
b) Draw a different shape that belongs in each set. Explain how you know that it belongs.

Polygons	Non Polygons



Apr 9-8:22 AM

5. Your teacher will give you a large copy of these polygons.



a) Which polygons appear to be regular?
b) How can you check that the polygons you identified in part a are regular? Use your strategy to check.
c) Sort the polygons into sets of regular and irregular polygons.
d) For each set in part c, draw a different polygon that belongs in that set.
e) Sort the polygons into sets of convex and concave polygons.
f) For each set in part e, draw a different polygon that belongs in that set.

6. Your teacher will give you a large copy of these road signs.



a) Name the polygon that each sign reminds you of.
b) Sort the signs into sets of regular and irregular polygons. Explain how you did this.

Apr 9-8:23 AM



7. a) Find at least 3 different irregular polygons outside the classroom.
   Describe each polygon you find.
   b) Find at least 3 different regular polygons outside the classroom.
   Describe each polygon you find.
   Name each polygon.

8. a) What do we call:
   - a regular triangle?
   - a regular quadrilateral?

   b) Use dot paper.
   Draw 3 different regular triangles.
   Draw 3 different regular quadrilaterals.
   c) What do you notice about the regular triangles you drew?
   What do you notice about the regular quadrilaterals you drew?

9. Can a concave quadrilateral be regular?
   Explain.

Apr 9-8:23 AM