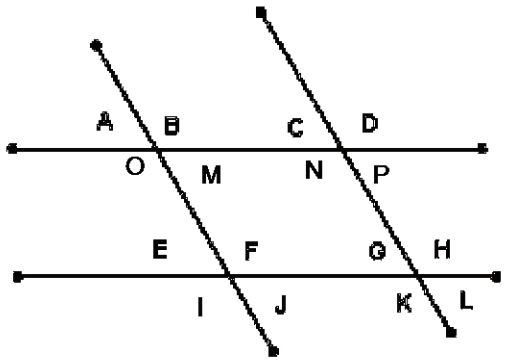
Date _____

CHAPTER 7: GEOMETRIC RELATIONSHIPS

REMEMBER!!



Use the parallel lines and letters above to provide examples of:

ADJACENT ANGLES OPPOSITE ANGLES

SUPPLEMENTARY ANGLES ALTERNATE ANGLES

INTERIOR ANGLES CORRESPONDING ANGLES

Draw examples of each and briefly describe the lengths and angles in each:

SCALENE TRIANGLE ISOSCELES TRIANGLE EQUILATERAL

Lengths: Lengths: Lengths:

Angles: Angles: Angles:

Draw examples of each and describe the lengths of each:

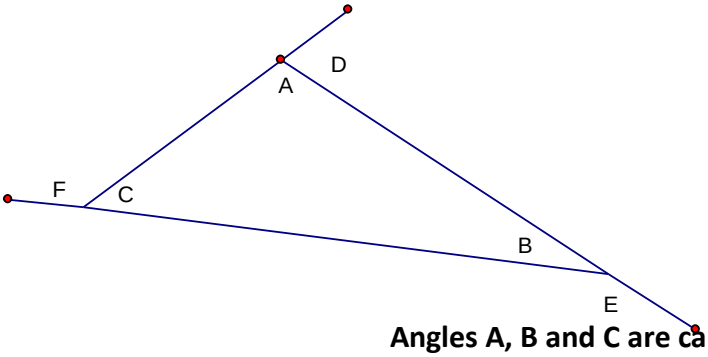
PARALLELOGRAM RECTANGLES RHOMBUS SQUARE

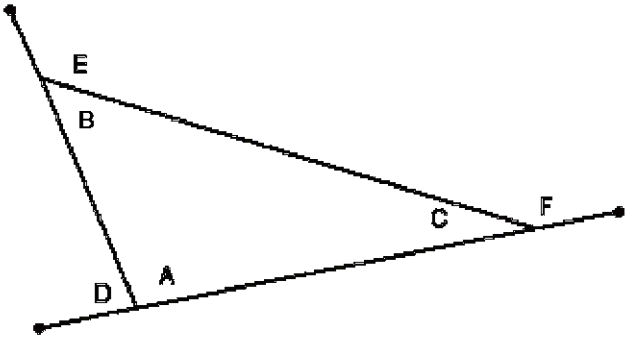
Lengths: Lengths: Lengths: Lengths:

ALL OPPOSITE ANGLES IN A PARALLELOGRAM ARE _____

7.1 Angle Relationships in Triangles

For the given triangles:





Angles A, B and C are called _____ _____
Angles D, E and F are called _____ _____

a) Determine the angles of A, B and C

b) Calculate the angles of D, E and F

a) Determine the angles of A, B and C

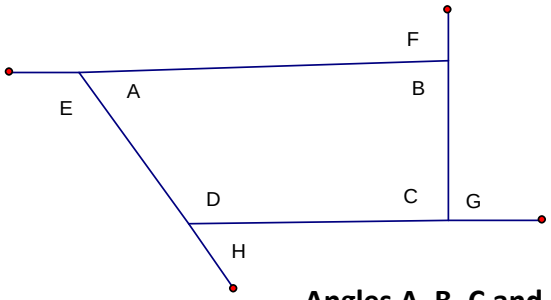
b) Calculate the angles of D, E and F

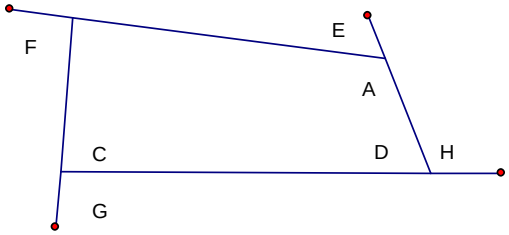
NOTICE: A + C = AND A + B = AND B + C =

FOR ALL TRIANGLES, THE _____ _____ ADD UP TO _____
FOR ALL TRIANGLES, THE _____ _____ ADD UP TO _____

EACH EXTERIOR ANGLE _____ THE SUM OF THE INTERIOR ANGLES AT THE OPPOSITE VERTICES

7.2 Angle Relationships in Quadrilaterals





Angles A, B, C and D are called _____ _____
Angles E, F, G and H are called _____ _____

a) Determine the angles of A, B, C and D

b) Calculate the angles of E, F, G and H

a) Determine the angles of A, B, C and D

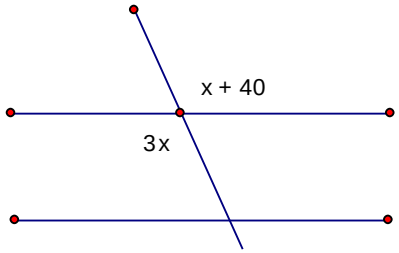
b) Calculate the angles of E, F, G and H

FOR ALL QUADRILATERALS, THE _____ _____ ADD UP TO _____
FOR ALL QUADRILATERALS, THE _____ _____ ADD UP TO _____

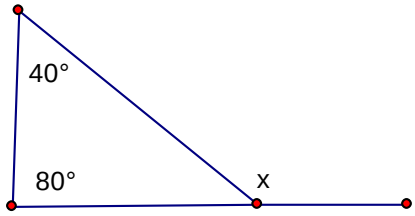
EXAMPLES:

Find the value of the variable(s) in each diagram:

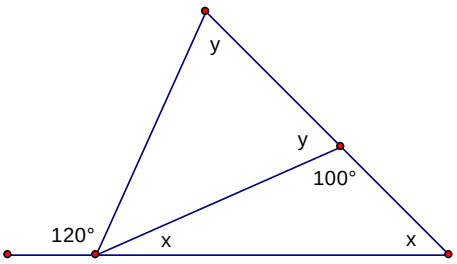
a)



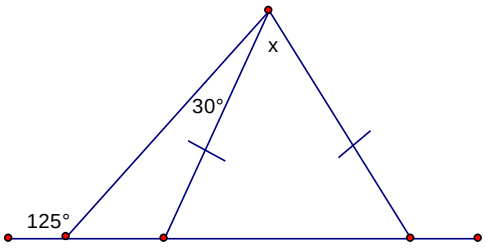
b)



c)



d)



HW. p.371 #1-5, 11 p.381 #1-3, 5, 7, 13