Chapter 8 Polygons

Activity 1 Classifying Triangles

1 AB = __3__ cm   m∠BAC = __60°__
  BC = __3__ cm   m∠ABC = __60°__
  AC = __3__ cm   m∠ACB = __60°__
  Triangle ABC is a̶ / an __equilateral__ triangle.

2 DE = __2.5__ cm   m∠EDF = __90°__
  EF = __3.9__ cm   m∠DEF = __50°__
  DF = __3__ cm   m∠DFE = __40°__
  Triangle DEF is a / a̶n̶ __scalene__ triangle.

3 GH = __3.4__ cm   m∠HGJ = __18°__
  HJ = __2__ cm   m∠GHJ = __112°__
  GJ = __4.5__ cm   m∠GJH = __50°__
  Triangle GHJ is a / a̶n̶ __scalene__ triangle.

4 KL = __3__ cm   m∠LKM = __32°__
  LM = __3__ cm   m∠KLM = __116°__
  KM = __5.1__ cm   m∠KML = __32°__
  Triangle KLM is a̶ / an __isosceles__ triangle.

5 NO = __4__ cm   m∠NOP = __45°__
  OP = __5.7__ cm   m∠ONP = __90°__
  NP = __5.4__ cm   m∠NPO = __45°__
  Triangle NOP is a̶ / an __isosceles__ triangle.

6 QR = __3.5__ cm   m∠RQS = __86°__
  RS = __4.8__ cm   m∠QRS = __47°__
  QS = __3.5__ cm   m∠QSR = __47°__
  Triangle QRS is a̶ / an __isosceles__ triangle.

7 TU = __3__ cm   m∠UTV = __118°__
  UV = __6__ cm   m∠TUV = __36°__
  TV = __4__ cm   m∠TVU = __26°__
  Triangle TUV is a / a̶n̶ __scalene__ triangle.

8 WX = __4__ cm   m∠XWY = __60°__
  XY = __4__ cm   m∠WXY = __60°__
  WY = __4__ cm   m∠WYX = __60°__
  Triangle WXY is a̶ / an __equilateral__ triangle.

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Triangles		
Equilateral	**Isosceles**	**Scalene**
A	C	F
B	D	H
G	E	I
J	K	
L	M	

10 a All the sides are of equal length, and all three angles are equal.

  b Two sides are of equal length, and the angles opposite the equal sides are equal.

  c The three sides have different lengths, and the sizes of all three angles are different.

11 Yes

12 Yes, when all the sides are equal.

13 Yes

14 No