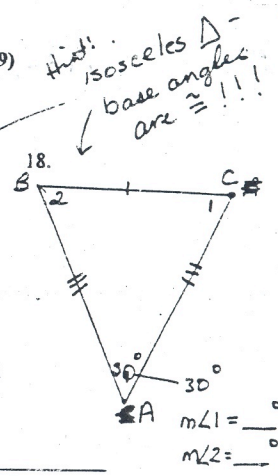
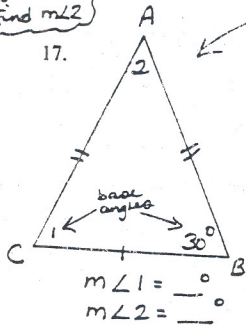
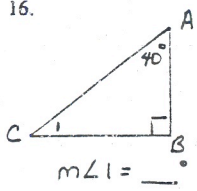
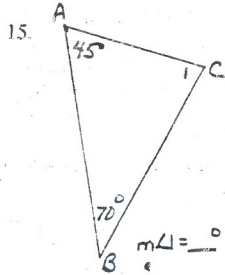
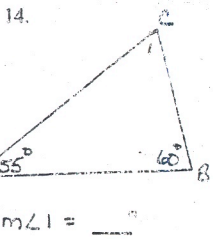


Super Important Rule:

13. What must be the sum of the three angles of a triangle? \_\_\_\_\_ degrees (p. 189)

Use the rule to find  $m\angle 1$  or  $m\angle 2$  (write as three letters)



*Handwritten note: 17 = 18 also find m22*

19. Why couldn't this triangle exist -  $m\angle A = 60^\circ$ ,  $m\angle B = 40^\circ$ ,  $m\angle C = 70^\circ$  \_\_\_\_\_

Decide what sort of triangle is given. You should have two answers for each triangle - use an answer from each of the following sets of classifications:

First use: Classification by angles: right, obtuse, acute, equiangular  
Then use: Classification by sides: isosceles, scalene, equilateral

- 20.  $m\angle A = 140^\circ$ ,  $m\angle B = 20^\circ$ ,  $m\angle C = 20^\circ$  this triangle is \_\_\_\_\_
- 21.  $m\angle A = 150^\circ$ ,  $m\angle B = 10^\circ$ ,  $m\angle C = 20^\circ$  this triangle is \_\_\_\_\_
- 22.  $m\angle A = 90^\circ$ ,  $m\angle B = 20^\circ$ ,  $m\angle C = 70^\circ$  this triangle is \_\_\_\_\_
- 23.  $m\angle A = 60^\circ$ ,  $m\angle B = 60^\circ$ ,  $m\angle C = 60^\circ$  this triangle is \_\_\_\_\_
- 24.  $m\angle A = 40^\circ$ ,  $m\angle B = 80^\circ$ ,  $m\angle C = 60^\circ$  this triangle is \_\_\_\_\_
- 25.  $m\angle A = 70^\circ$ ,  $m\angle B = 40^\circ$ ,  $m\angle C = 70^\circ$  this triangle is \_\_\_\_\_

Use the distance formula to classify each triangle by side measures (isosceles, scalene or equilateral)

SHOW YOUR WORK! Distance Formula:  $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

26. Triangle PQR with vertices P(0, 6) Q(3, 6) and R(3, 0)  
PQ = \_\_\_\_\_  
QR = \_\_\_\_\_  
PR = \_\_\_\_\_

Triangle PQR is \_\_\_\_\_

27. Triangle PQR with vertices P(-3, -1) Q(2, 1) and R(2, -3)  
PQ = \_\_\_\_\_  
QR = \_\_\_\_\_  
PR = \_\_\_\_\_

Triangle PQR is \_\_\_\_\_

28. Triangle PQR with vertices P(4, 0) Q(-2, 0) and R(1, 5)  
PQ = \_\_\_\_\_  
QR = \_\_\_\_\_  
PR = \_\_\_\_\_

Triangle PQR is \_\_\_\_\_