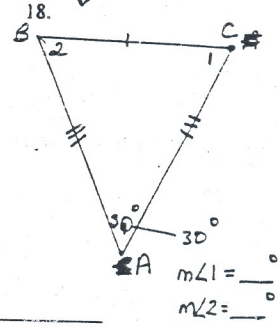
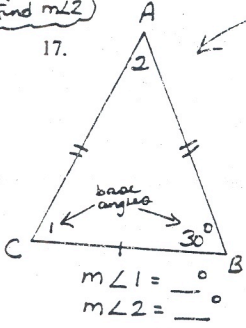
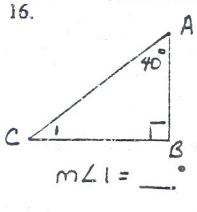
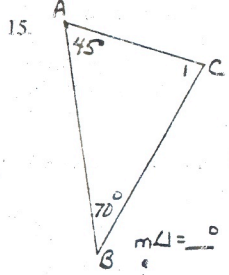
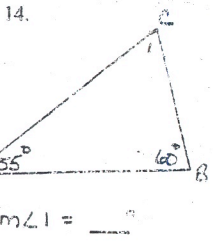


Super Important Rule:

13. What must be the sum of the ^(interior) three angles of a triangle? _____ degrees (p. 189)

Use the rule to find $m\angle 1$ or $m\angle 2$ (write as three letters) **17 = 15 also find m2*

Hint: isosceles Δ - base angles are \cong !!!



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 _____