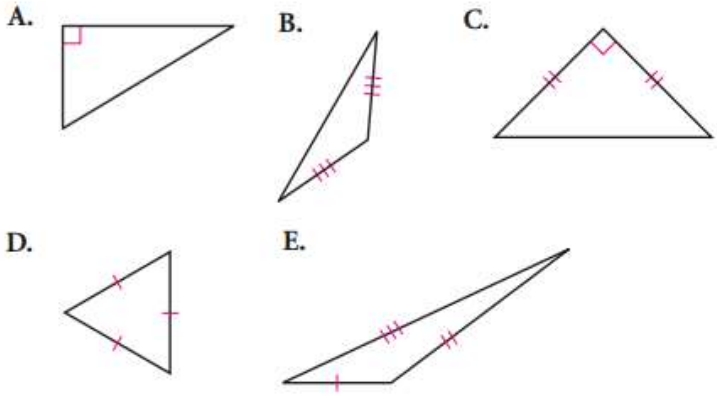
Lesson 1.5 Assignment Name:_____

Match the term on the left with its figure on the right.

1) Equilateral triangle
2) Scalene right triangle
3) Isosceles right triangle
4) Isosceles obtuse triangle



Sketch, label, and mark the figures.

5) Isosceles acute triangle ACT with $AC = CT$

6) Scalene triangle SCL with angle bisector $\overline{CM}$

7) Isosceles right triangle CAR with $m\angle CRA = 90°$

8) Two different isosceles triangle with perimeter $4a + b$

9) Two noncongruent triangles, each with side 6 cm and an angle measuring $40°$

10) Isosceles acute triangle with base AC and vertex angle B

11) Isosceles obtuse triangle ZAP with base angles A and Z

Tell whether the statement is true or false. For each false statement, sketch a counterexample or explain why the statement in false.

12) An acute angle is an angle whose measure is less than $90°$.

13) If two lines intersect to form a right angle, then the lines are perpendicular.

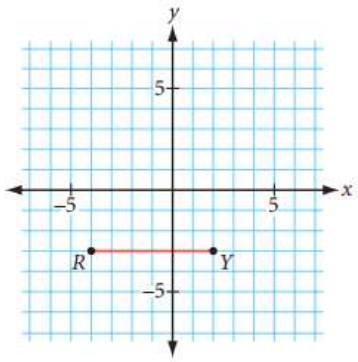
14) A diagonal is a line segment that connects any two vertices of a polygon.

15) A ray that divides the angle into two angles is the angle bisector.

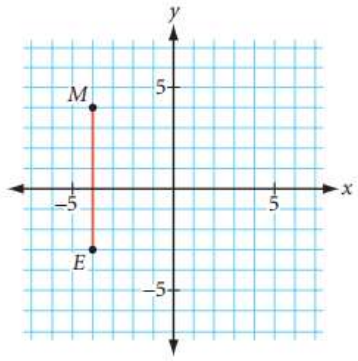
16) An obtuse triangle has exactly one angle whose measure is greater than 90°.

Use the graphs.

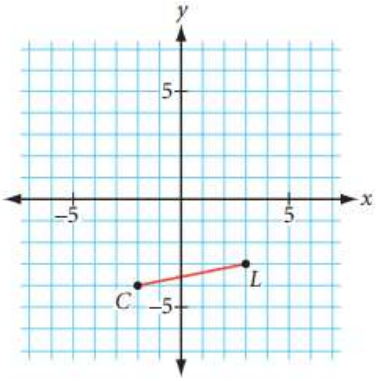
17) Locate point L so that ΔLRY is an isosceles triangle. What are the coordinates of point L?



18) Locate point O so that ΔMOE is an isosceles right triangle. What are the coordinates of point O?

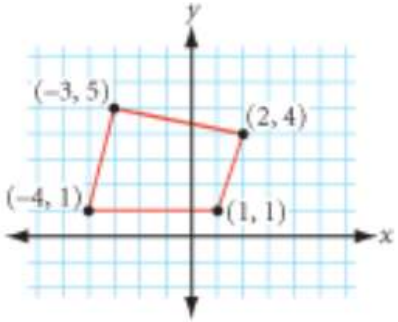


19) Locate point R so that ΔCRL is an isosceles right triangle. What are the coordinates of point R?



Complete.

20) Use the ordered pair rule $(x, y) \rightarrow (x + 1, y - 3)$ to relocate the four vertices of the given quadrilateral. Connect the four new points to create a new quadrilateral. Do the two quadrilaterals appear congruent?



Sketch, label, and mark each figure.

21) Pentagon $PENTA$ with $PE = EN$

22) Hexagon $NGAXEH$ with $\angle HEX \cong \angle EXA$

23) Equiangular quadrilateral $QUAD$ with $QU \neq QD$