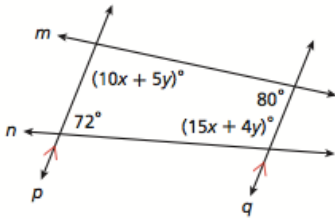
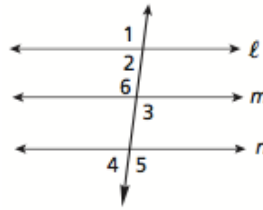


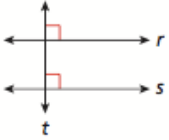
1) Find  $x$  and  $y$  in the diagram below.



2) Use a two-column proof. Given:  $m\angle 2 + m\angle 3 = 180^\circ$ .  
Prove:  $l \parallel m$ .



3) Use a two-column proof. If two coplanar lines are perpendicular to the same line, then the two lines are parallel to each other.



4)  $\overrightarrow{ST} \parallel \overrightarrow{VW}$  for  $S(-3, 5)$ ,  $T(1, -1)$ ,  $V(x, -3)$ , and  $W(1, y)$ . Find a set of possible values for  $x$  and  $y$ .

5) If the length of the hypotenuse of a right triangle is 17 units and the legs lie along the  $x$ -axis and  $y$ -axis, find a possible equation that describes the line that contains the hypotenuse.