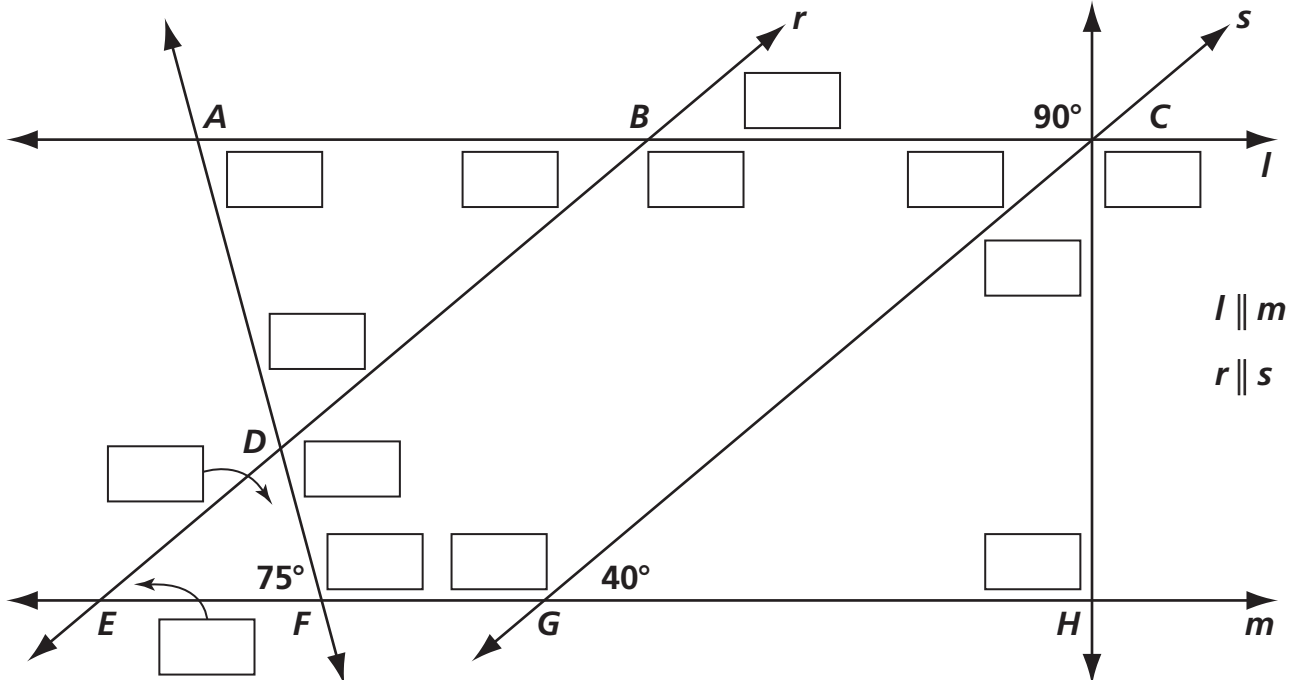


Investigating Quadrilaterals

1 Without using a protractor, find the missing angle measurements.



The lines above form triangles, quadrilateral, and pentagons (five-sided polygons).

2 Identify two pentagons that do not “cave in” on themselves and record their vertices. (Pentagon *ACHED* doesn’t count, because vertex *D* makes it cave in.)

3 Find the sums of the measures of the angles inside the convex pentagons you identified. (Only include the angles at the vertices.) What do you notice?

4 Fill in the table for polygons that do not cave in on themselves. Find a pattern and predict the sums of the measures of the angles inside a hexagon (six sides) that does not cave in on itself.

Number of Sides	3	4	5	6
Sum of the Angle Measures				