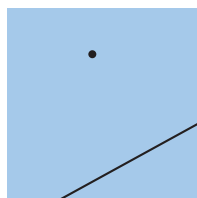


Investigation • Constructing Parallel Lines by Folding

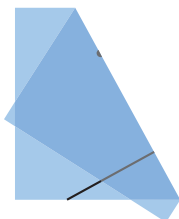
Name _____ Period _____ Date _____

You will need: patty paper, a straightedge

How would you check whether two lines are parallel? One way is to draw a transversal and compare corresponding angles. You can also use this idea to *construct* a pair of parallel lines.



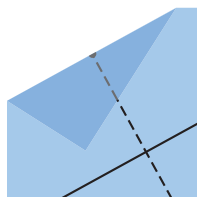
Step 1



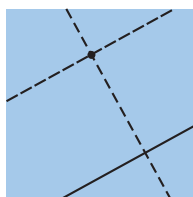
Step 2

Step 1 Draw a line and a point on patty paper as shown.

Step 2 Fold the paper to construct a perpendicular so that the crease runs through the point as shown. Describe the four newly formed angles.



Step 3



Step 4

Step 3 Through the point, make another fold that is perpendicular to the first crease.

Step 4 Compare the pairs of corresponding angles created by the folds. Are they all congruent? Why? What conclusion can you make about the lines?