

Construction 5 *Perpendicular at a point on a line*

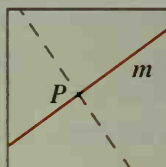
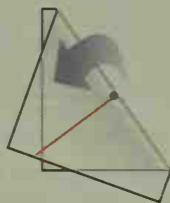
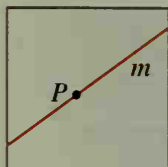
Given a point on a line, construct the perpendicular to the line at the given point.

Given: Point P on line m

Construct: The perpendicular to m at P

Procedure: Fold the paper so that one side of line m is on top of the other and the crease goes through P .

The crease is perpendicular to m at P .



Construction 6 *Perpendicular from a point outside a line*

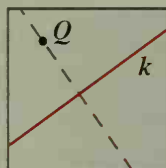
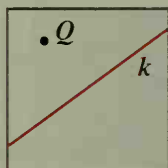
Given a point outside a line, construct the perpendicular to the line from the given point.

Given: Point Q outside line k

Construct: The perpendicular to k from Q

Procedure: Fold the paper so that one side of line k is on top of the other and the crease goes through Q .

The crease is the perpendicular to k from Q .



Exercises

1. Draw any \overline{AB} . Use Construction 1, below, to construct \overline{YZ} congruent to \overline{AB} .

Construction 1 *Congruent segment*

Given a segment, construct a segment congruent to the given segment.

Given: \overline{AB}

Construct: A segment congruent to \overline{AB}

Procedure: Place a piece of paper over \overline{AB} and trace \overline{AB} onto the piece of paper. Label the endpoints of the new segment Y and Z .

\overline{YZ} is congruent to \overline{AB} .