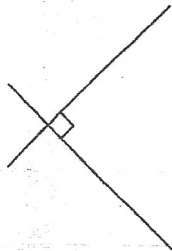




Quick Review

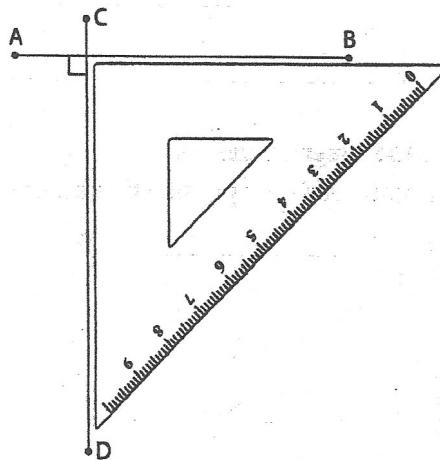
Two lines are perpendicular if they intersect at right angles.



Here are 2 strategies to draw a line segment perpendicular to line segment AB.

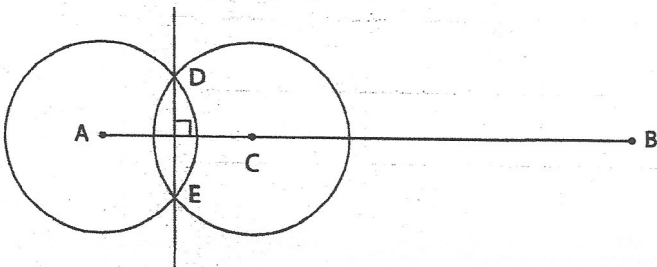
Using a plastic right triangle

- Place one of the shorter sides of the triangle along line segment AB. Draw line segment CD along the other shorter side. Line segment AB is perpendicular to CD.



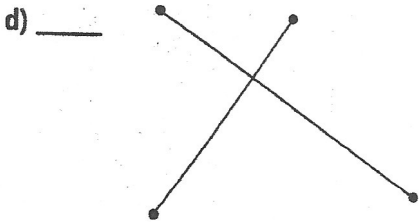
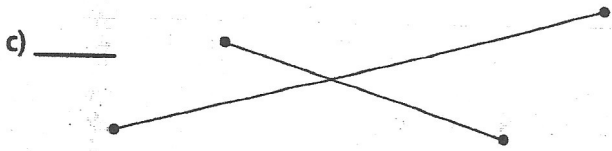
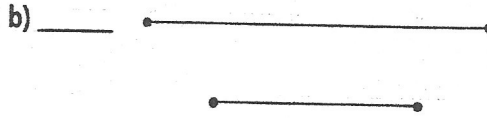
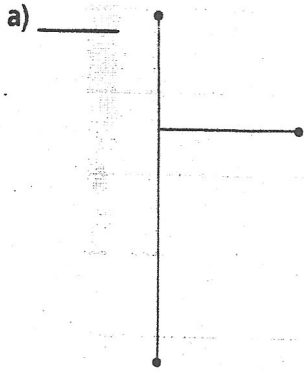
Using a ruler and a compass

- Mark a point C on line segment AB. Set the compass so the distance between the compass and pencil points is greater than one-half the length of AC. Place the compass point on A. Draw a circle that intersects AB.
- Place the compass point on C. Draw a circle to intersect the first circle you drew, at D and E.
- Draw a line through DE. Line segment DE is perpendicular to AB.



Practice

1. Are the line segments in each pair perpendicular?



2. Draw a line segment.

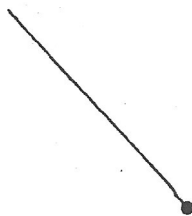
Use any method you like to draw a perpendicular line segment.

Explain your strategy.

3. Look around you for examples of perpendicular line segments. List 6 examples.

4. Draw a line segment perpendicular to each segment shown.

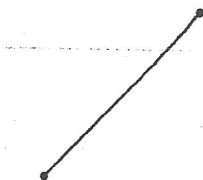
a)



b)



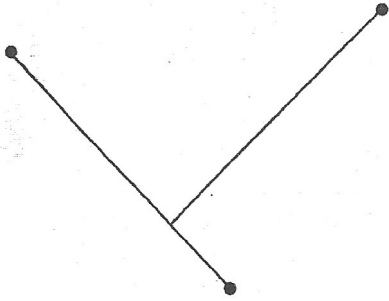
c)



d)



5. How do you know these line segments are perpendicular?



6. Look at the diagram below.

Find as many pairs of perpendicular line segments as you can.

