

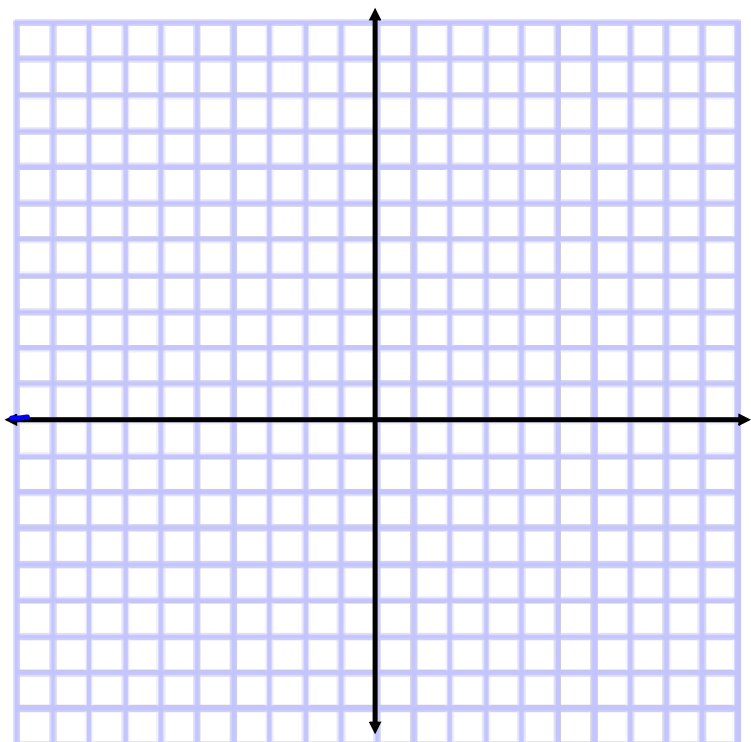


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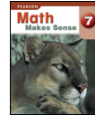
Lesson 4

- Plot the points and connect $A(-2, 3)$, $B(3,4)$, $C(0, -2)$, $D(-4, -1)$
- Reflect across the x axis
- Translate the image R2 D1



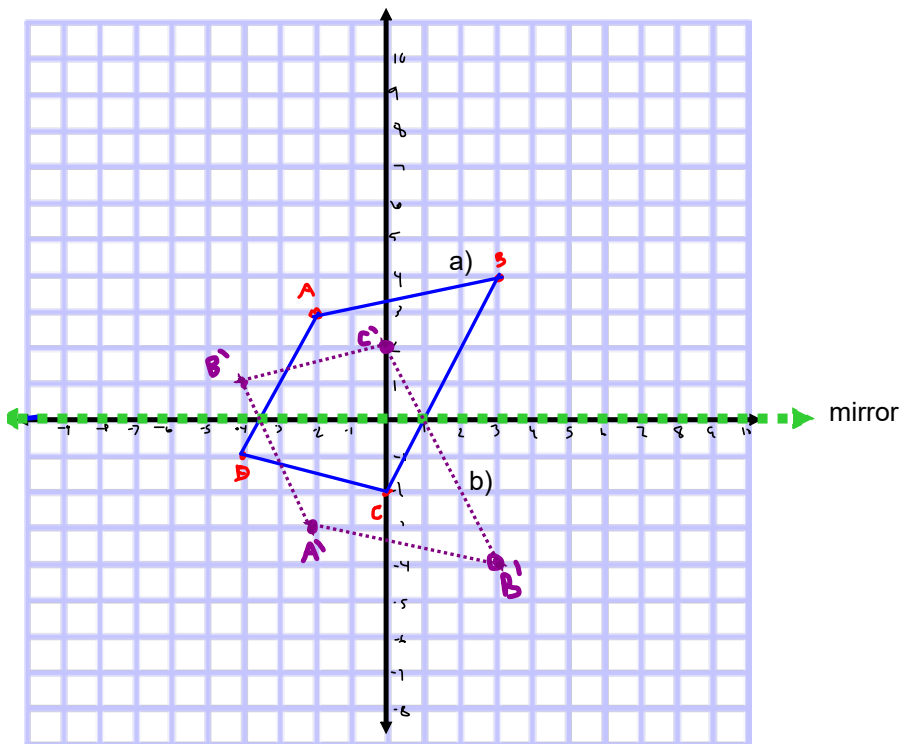


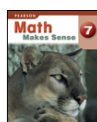
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Lesson 4

- a) Plot the points and connect $A(-2, 3)$, $B(3,4)$, $C(0, -2)$, $D(-4, -1)$
- b) Reflect across the x axis
- c) Translate the image R2 D1



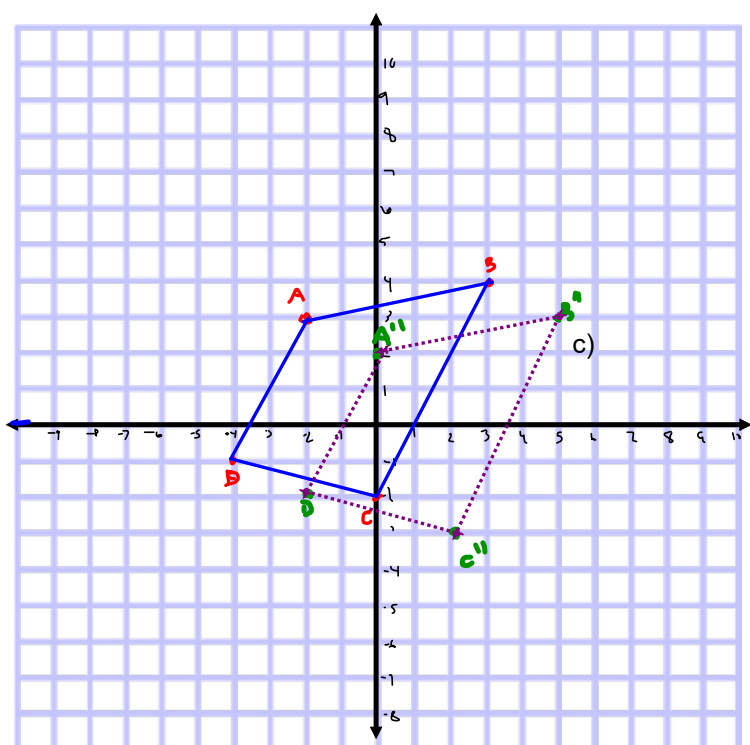


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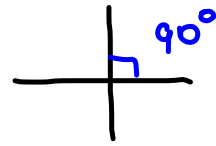
Lesson 4

- Plot the points and connect $A(-2, 3)$, $B(3, 4)$, $C(0, -2)$, $D(-4, -1)$
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Perpendicular Lines

Two line segments are **perpendicular** if they intersect at right angles.



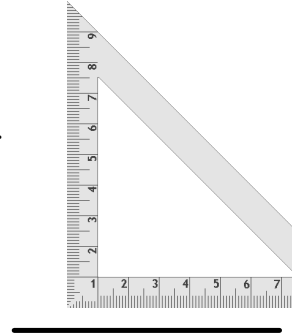
Here are some strategies to draw a line segment perpendicular to a given line segment.

Method 1

- **Use a plastic triangle**

Place the base of the triangle along the line segment.

Draw a line segment along the side that is the height of the triangle.



Method 2

- **Use paper folding**

Fold the paper so that the line segment coincides with itself. Open the paper

The fold line is perpendicular to the line segment.

Method 3

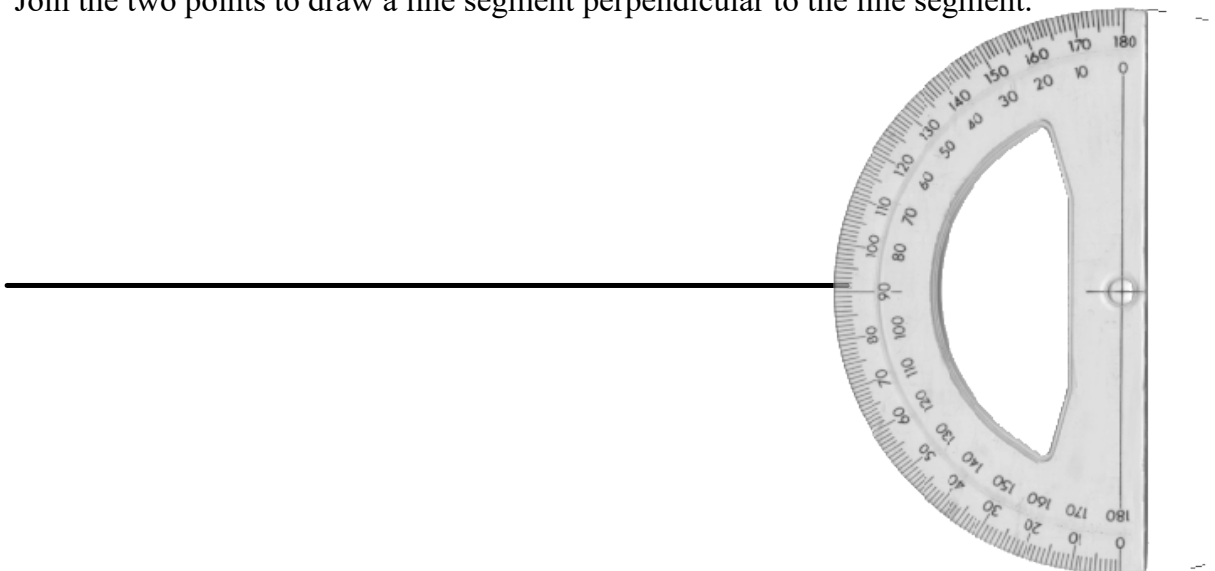
- **Use a ruler and a protractor**

Choose a point on the line segment

Place the center of the protractor on the point.

Align the base line of the protractor with the line segment. Mark a point at 90.

Join the two points to draw a line segment perpendicular to the line segment.



Method 3

I don't have one at home

- Use a Mira

Place the Mira so that the reflection of the line segment coincides with itself when you look in the Mira.

Draw a line segment along the edge of the Mira.

Method 4

- Use a ruler and compass as shown below.

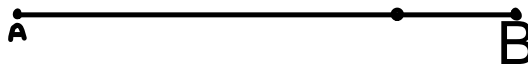
- Mark a point C on AB

- Make the length on the compass more than half BC
Place compass on B and draw a circle

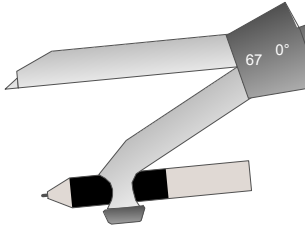
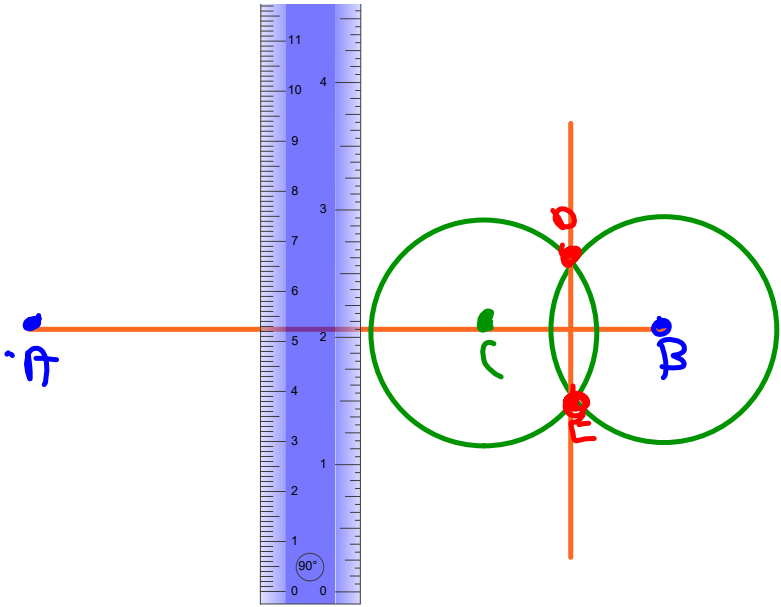
- Do not change the compass
Place compass on C and draw a circle

- Label the points where the circles intersect, D and E

- Draw a line through D and E.
DE is perpendicular to AB



Elearn Math7 u8 geom L4 how to draw perpendicular lines.notebook



Class/Homework

Look at some videos on how to construct perpendicular lines on youtube.

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