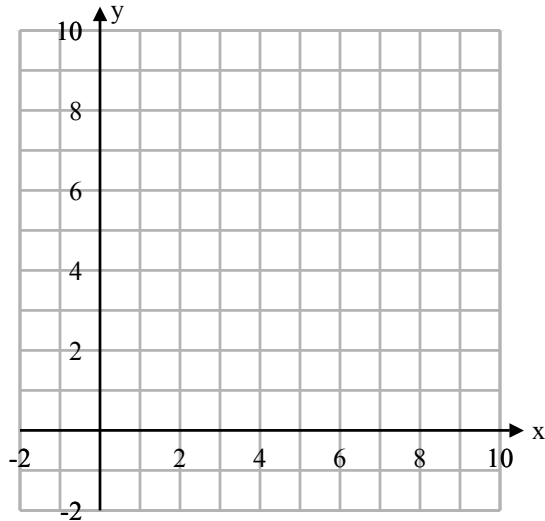


Adaptation of 2003 Calculus AB/BC question 1 for Middle Grades



1. On the coordinate plane provided above, plot and label the points $A(2,1)$, $B(9,1)$, and $C(8,5)$.
2. Draw line segments \overline{AB} , \overline{BC} , and \overline{AC} .
3. What is the length of line segment \overline{AB} ? How could you determine the length from the coordinates of the points?
4. Draw a line segment from point C that is perpendicular to \overline{AB} . Label the point where the line segment intersects \overline{AB} as point P .
5. What are the coordinates of point P ?

