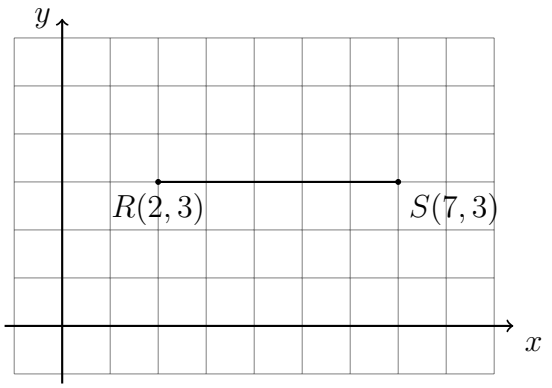
2.1 Homework: Segment and area review

1. Do Now: The horizontal line segment $\overline{RS}$ is plotted on the coordinate plane with $R(2, 3)$ and $S(7, 3)$.

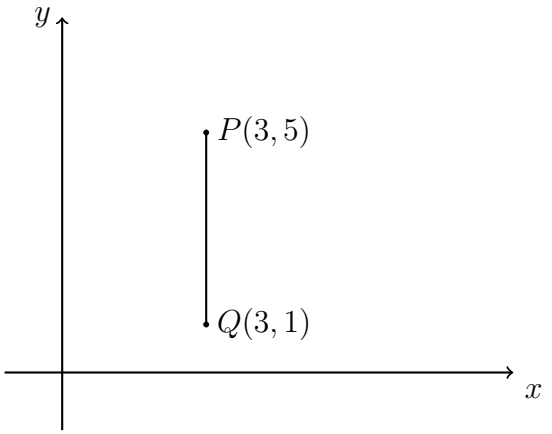
   Find length RS, showing the calculation.



2. The vertical line segment $\overline{PQ}$ is plotted on the coordinate plane with $P(3, 5)$ and $Q(3, 1)$.

   Find the length PQ.

   Show the calculation, including the absolute value bars.

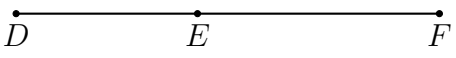


3. Given $\overline{ABC}$, $AB = 84$, $AC = 116$.

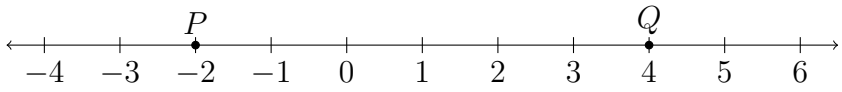
   Find BC.

4. Given $\overline{DEF}$, $DE = 3\frac{1}{3}$, and $EF = 4\frac{1}{6}$.

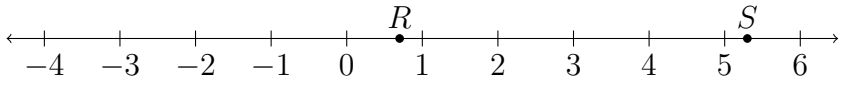
   Find DF.



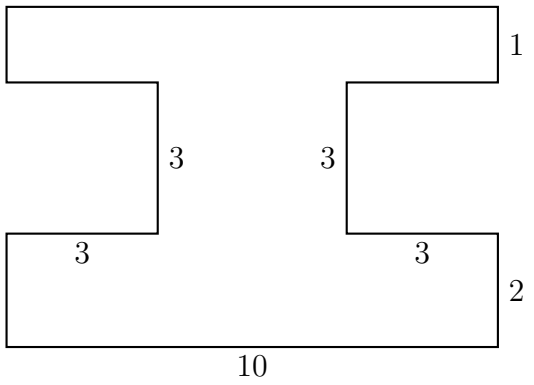
5. Given $\overleftrightarrow{PQ}$ as shown on the number line. Find PQ.



6. Given $\overleftrightarrow{RS}$, with $R = 0.7$ and $S = 5.3$. Find RS, showing the formula.

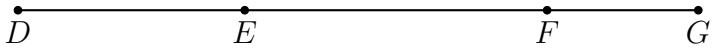


7. The shape shown below is composed of straight lines and right angles, with some lengths as marked. Find the perimeter of the figure. Show your work.



8. Given $\overline{DEFG}$, $DE = 1\frac{2}{5}$, $EF = 2\frac{3}{10}$, and $FG = \frac{4}{5}$. (diagram not to scale)

   Find DG, expressed as a fraction, not a decimal.



9. Given the rectangle $ABCD$ shown below, with $AB = 6\frac{1}{3}$ and $BC = 2\frac{1}{2}$. Find the area of the rectangle, expressing your result as a fraction.