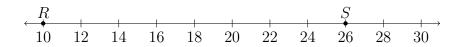
BECA / Dr. Huson / Geometry 02-Midpoint+distance Name: pset ID: $27\,$

2-7DNRQ-Segments+area

1. Complete the construction of an equilateral triangle with one side as \overline{AB} .

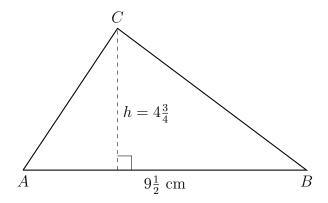


2. Given \overrightarrow{RS} as shown on the number line.



Mark and label the point M that bisects \overline{RS} .

3. Find the area of $\triangle ABC$. The altitude h of the triangle is $4\frac{3}{4}$ centimeters and the base $AB=9\frac{1}{2}$ cm. (diagram not to scale)



4. Given \overline{PQRS} , $PQ = 3\frac{1}{4}$, $QR = 1\frac{1}{4}$, and $RS = 5\frac{1}{2}$. (diagram not to scale) Find PS.



5. Given that M is the midpoint of \overline{AB} . AM = 7x + 4, BM = 5x + 8. Find AB. Complete all the steps for full credit (including a fully-labeled drawing and the check)