BECA / Dr. Huson / Geometry 02-Midpoint+distance   Name:
pset ID: 18

2-3DN-Midpoint+rectangles

1. Given $\overleftrightarrow{TC}$ as shown on the number line.

$$
\begin{array}{c}
T \qquad\qquad\qquad\qquad C \\
\end{array}
$$

80   82   84   86   88   90   92   94   96   98   100
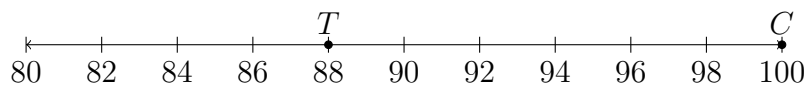
   What is the midpoint between the points T and C?

2. Find the measure of $\angle P$ in degrees?

P
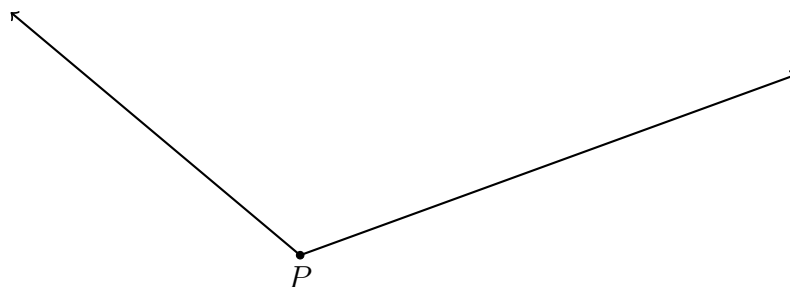
3. Given $\overline{AMB}$, M bisects $\overline{AB}$, $AM = 3x - 10$, $BM = x + 4$. Find AB.
   Complete all the steps for full credit.

   (a) Sketch and label the situation

   (b) Write an equation

   (c) Solve for x

   (d) Answer the question

   (e) Check your solution

4. Draw a rectangle that is 9 centimeters long horizontally and 4 centimeters tall vertically. (use a square to ensure the sides are perpendicular)

5. Given the rectangle $ABCD$ shown below, with $AB = 10$ and $BC = 5$. The diagonal $\overline{AC}$ is drawn to create two triangles. Find the area of the lower triangle, $\triangle ABC$.
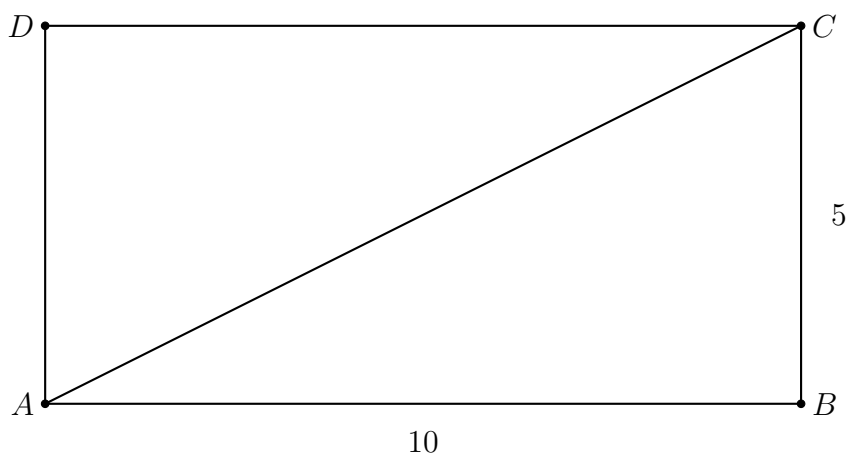
6. The line segment $\overline{MN}$ is trisected by the points K and L. Given that $MN = 15$. Find KL. (draw a picture)