15. [6 pts - 3 each/] Draw and label examples on the grid of the following, if possible. If not, explain why not.

(a) a kite that is not a rhombus (label with an “A” inside)

(b) a quadrilateral that is equiangular but not equilateral (label with a “B” inside)

\[ \text{\begin{tikzpicture}
\draw[thin] (0,0) grid (10,8);
\draw[thick] (3,0) -- (4,2) -- (5,5) -- (4,6) -- (3,4) -- cycle;
\node at (3.5,0.5) {A};
\node at (4.5,5.5) {B};
\end{tikzpicture}} \]

16. (a) [4 pts] Let \( A = (3, 5) \) and \( B = (0, -1) \). Find the coordinates of a point \( C \) on \( \overline{AB} \) for which \( \overline{AC} \) is twice as long as \( \overline{AB} \). Clearly indicate your answer! (Grid paper is available up front.)

\[ \text{A to B: back 3, down 6, repeat from B} \]

\[ (-3, -7) \]

\[ \text{or B to A: just 3, up 6, repeat twice from A} \]

\[ (9, 17) \]

(b) [8 pts] Let \( A = (3, 5) \) and \( B = (0, -1) \). Find the coordinates of a point \( R \) for which \( \triangle ABR \) is an isosceles right triangle. You may position the right angle at any vertex you like. Clearly indicate your answer! (Grid paper is available up front.)

\[ \text{A to B: \(-\frac{6}{3}, -\frac{3}{3}\) perp: \(-\frac{3}{6}\)} \]

\[ \text{\(-\frac{3}{6}\) from A:} \]

\[ (9, 2) \]

\[ \text{\(-\frac{3}{6}\) from B:} \]

\[ (-3, 8) \]

\[ \text{\(-\frac{3}{6}\) from B:} \]

\[ (6, -4) \]

\[ (6, 2) \]