Unit 6: Distance & slope   Name:

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6.12 Do Now: Tangent function, trigonometric ratios
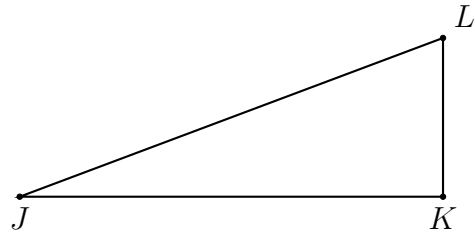
  1. Express the result to the nearest thousandth.

    (a) $\tan 45° =$ (c) $\tan 88° =$

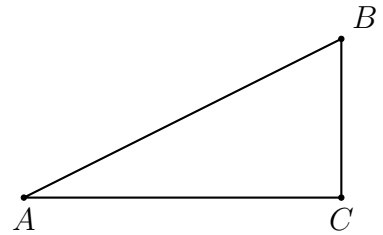   (b) $\tan 58° =$ (d) $\tan 30° =$

 2. Given right $\triangle JKL$ with $\overline{JK} \perp \overline{KL}$, $JK = 10$, $m\angle J = 35°$.

    (a) Use the tangent function to find the length KL

    (b) Use the Pythagorean formula to find the length JL, to the *nearest hundredth*.

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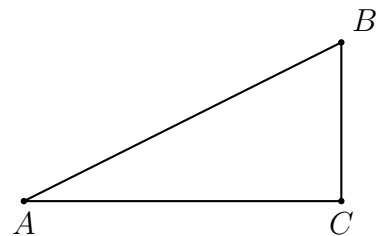Unit 6: Distance & slope   Name:
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3. Given right $\triangle ABC$ with $AC = 8.2, BC = 5.1, m\angle C = 90°$. Find the value of $m\angle A$, expressed as a decimal to the nearest whole number.

4. Given right $\triangle JKL$ with $\overline{JK} \perp \overline{KL}$, $JK = 17$, $m\angle J = 28°$. Find the length KL.
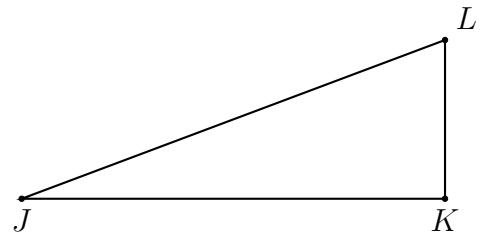
5. Given right $\triangle ABC$ with $AC = 8, BC = 6, m\angle C = 90°$. Find the value of $m\angle B$, expressed as a decimal to the nearest thousandth.

6. Spicy: Given a rectangle with area 48, width x, and length $x + 8$.

   (a) Find x.

   (b) Find the perimeter of the rectangle.