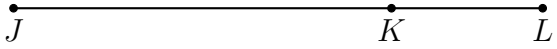
4.3 Homework: Angle review

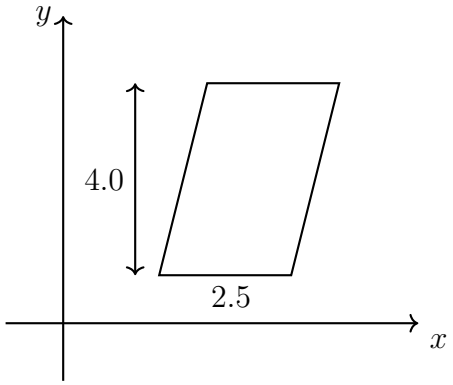
1. Given $\overline{JKL}$, $JK = 5.4$, and $KL = 1.1$. Find JL.

   Show your work by marking the diagram and writing an equation.



2. A parallelogram is shown on the x-y plane having a base $b = 2.5$ and height $h = 4.0$.

   Find its area, showing the calculation.



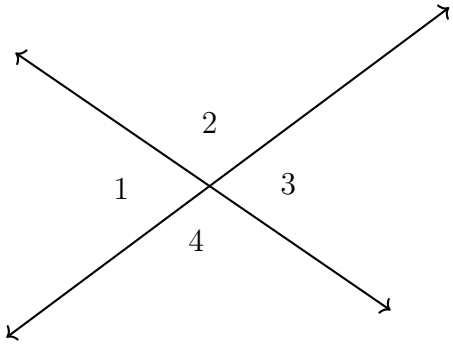
3. Subtract to find the length between $P(-3)$ and $Q(2)$. Take the absolute value if necessary since lengths are positive numbers.

4. As shown below, two lines intersect making four angles: $\angle 1$, $\angle 2$, $\angle 3$, and $\angle 4$.

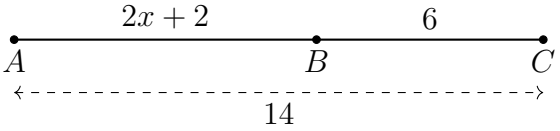
   Given $m\angle 2 = 105°$.

   (a) Find $m\angle 3$

   (b) Find $m\angle 4$

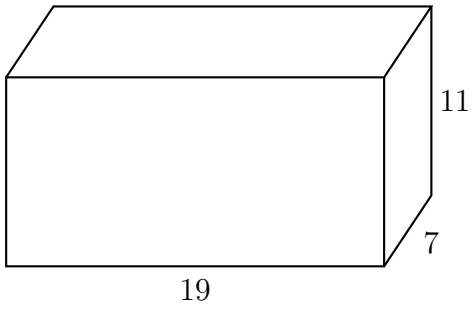


5. Given $\overline{ABC}$, $AB = 2x + 2$, $BC = 6$, $AC = 14$. Find x.



6. Find the volume of a rectangular prism (box). Its length is $l = 19$ inches, its height $h = 11$ inches, and depth is $w = 7$ inches. Start with the equation

   $V = l \times w \times h$



7. Apply the Angle Addition postulate. Write and equation to support your work.

   Given $m\angle CBD = 28°$, $m\angle ABC = 90°$.

   Find $m\angle ABD$.