Review – Chapter 12

1. Determine the distance between the points (5, 12) and (21, 6).



1. Mari draws line segment AB on a coordinate plane. The coordinates of A are (1, 5). The coordinates of B are (­­-3, 2). She translates the line segment 5 units to the left. She names this line segment A’B’.
2. Identify the coordinates of A’ and B’.



1. Describe how a horizontal translation changes the coordinates of the endpoints.



1. How does the length of the image compare with the length of the pre-image?



1. Use construction tools to copy line segment CD.



1. Calculate the midpoint of a line segment with the endpoints (-2, -1) and (6, 3).



1. Mical bisected line segment GH. He labeled the midpoint *I*. Compare the lengths of $\overbar{GI}$ and $\overbar{IH}$. Explain your reasoning.
2. Cheyanne drew angle JKL on the coordinate plane.



1. Translate angle JKL down 7 units. Label the image J’K’L’.
2. Describe how a vertical translation changes the coordinates of the angle endpoints.



1. Use construction tools to bisect angle JKL.



1. The equation of line m is
2. Write the equation of a line that is parallel to line m. Explain your reasoning.



1. Write the equation of a line that is perpendicular to line m. Explain your reasoning.



1. Determine the equation of a line that is perpendicular to the line y = - 5x – 8 and passes through the point (- 10, 7) 
2. Calculate the distance between the line f(x) = 2x – 5 and the point (-6, -2)?



1. Use construction tools to construct a square using the given perimeter.



