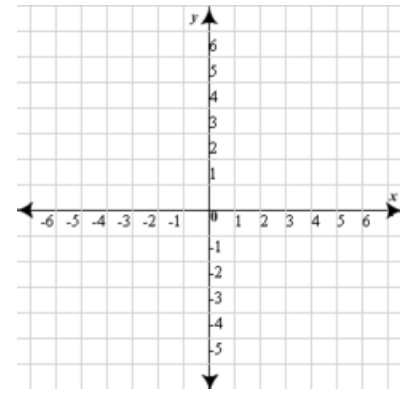


08-25-14 Warmup/Lesson
(no journals on Mondays)

Consider the points R(-4, 5) and Q(2, -3).



1. Plot the points.
2. What is the distance between these points? Use the distance formula and round your answer to the nearest thousandth if necessary.
3. What is the slope of \overline{RQ} ? Show work.
4. Point M is the midpoint of \overline{RQ} . What are M's coordinates? Show work.
5. What is the slope of a line parallel to \overline{RQ} ? Explain.
6. What is the slope of a line perpendicular to \overline{RQ} ? Explain.

*Point-Slope Form
of a line*

(Algebra I)

If m is the slope of a line, and (x_1, y_1) is any point on that line, then:

$$y - y_1 = m(x - x_1)$$

is the equation of that line in **point-slope form**.

7. \overleftrightarrow{ET} is the perpendicular bisector of \overline{RQ} . What is the equation for \overleftrightarrow{ET} in point-slope form?

Example: Point (2,-3) slope = 1/3

8. Consider $\triangle RME$. Complete the statement: $\triangle RME \cong$ _____