Bellwork Friday, April 4, 2014

1. Is ABCD a Parallelogram? Explain your answer.

A(24,18) B(15, -8) C(-7, -5) D(2, 21)

AC $\left(\frac{24+-7}{2}, \frac{18+-5}{2}\right) = (8.5, 6.5)$

BD $\left(\frac{15+2}{2}, \frac{-8+21}{2}\right) = (8.5, 6.5)$

Yes b/c same mdpt means diagonals bisect

2. Use Rhombus ABCD to do the following:

A(1, -7) B(6, 3) C(-5, 1) D(-10, -9)

Find the slope of both diagonals.

AC $m = \frac{-4}{3}$ $\frac{-7-1}{1-5} = \frac{-8}{6}$ BD $m = \frac{3}{4}$

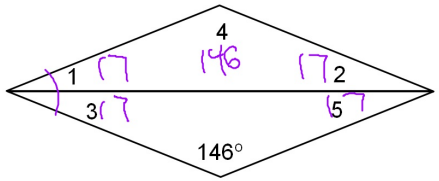
How are the diagonals related to each other?

Perpendicular.

Slopes are opposite reciprocals

3. Find the measures of the numbered angles in the Rhombi below.

a)



b)