In activity 9, you are introduced to vectors. You will discover what quantities are and are not vectors, and what exactly a vector is. It is important to know this because you will be asked to make calculations with vectors. This activity takes a geometric look at vectors. In Aleks, you look at a geometric approach of vector addition and vector subtraction. Furthermore, activity 9 introduces you to the magnitude of a vector, scalar multiplication, and vector addition. In your Aleks program you are asked to find the all three of these.

Review questions:
1. Define the angle measurement system of degrees and give a rationale for its importance.
2. Define the angle measurement system of radians and give a rationale for its importance.
3. What are some key features that define vectors? Give definitions for each term that you use.
4. Two vectors have the same magnitude and direction, but they are plotted in different positions on the coordinate plane. Jane argues that they are the same. Joseph argues that they are different. Who is correct and why?
5. Draw a diagram that explains the geometric process of adding two vectors together. Why is it the “parallelogram process”?
6. Draw a right triangle. Explain how you would go about labeling the sides and angle measures.
7. Create a right triangle. Label the side lengths and the angle measures.
8. What is the difference between a radian and a degree?
9. When making calculations, when is it okay to round?