

Vector Drawing

Name:

Block:

Seat:

Instructions and Questions

1. Vectors can be of any dimension, but this exercise only uses two dimensions as in $\langle x, y \rangle$ where x is the horizontal change from the current position, and y is the vertical change from the current location. Try clicking or dragging on the canvas to move the starting point. Vectors are not like coordinates that have an absolute location—instead everything is relative. Try changing the scale factor number to make it bigger or smaller, and then press the “Update” button (or touching the canvas) to redraw it with the new setting. What line width looks best to you?
2. Change the color code for the vectors, shadow or background. Use the link and experiment. There are hundreds of different color codes for shades of purple—try to pick one that you like that no one else in class has found:
3. Each line in the vector list has just one vector. Try adding a fifth vector to the list: $\langle -5, 0 \rangle$. If you have a blank line at the end or forget the bracket or comma, it will say which line has the problem. Now add some vectors to the list of vectors, one per line, and press the “Update” button.
4. What direction does $\langle -4, 5 \rangle$ go in?
5. Make a list of four vectors to make a square. What are the vectors you used?
6. Name four vectors that make a trapezoid
7. Name three vectors that make an isosceles triangle
8. Name three vectors that form an equilateral triangle
9. Name five vectors that make a star.
10. Find a drawing from one of the links below (from 2001-2006), and see if you can copy and paste it in the vector list to see the drawing. Of the ones you tried, what was your favorite one?
11. Make your own drawing, copy and paste your list of vectors into Google doc you can share.