

In 2D, vectors may be thought of as arrows with a fixed length and direction. The place at which the arrow starts is not important, so they may be translated around the plane without affecting the value of the vector.

This allows us to add and subtract vectors visually: if the vectors can be translated so as to form a closed circuit then the vector sum is zero. If the vectors cannot be translated so as to form a closed circuit then their vector sum is not zero, as in this diagram in which the vectors on the left have zero sum, whereas the vectors on the right don't have zero sum.

