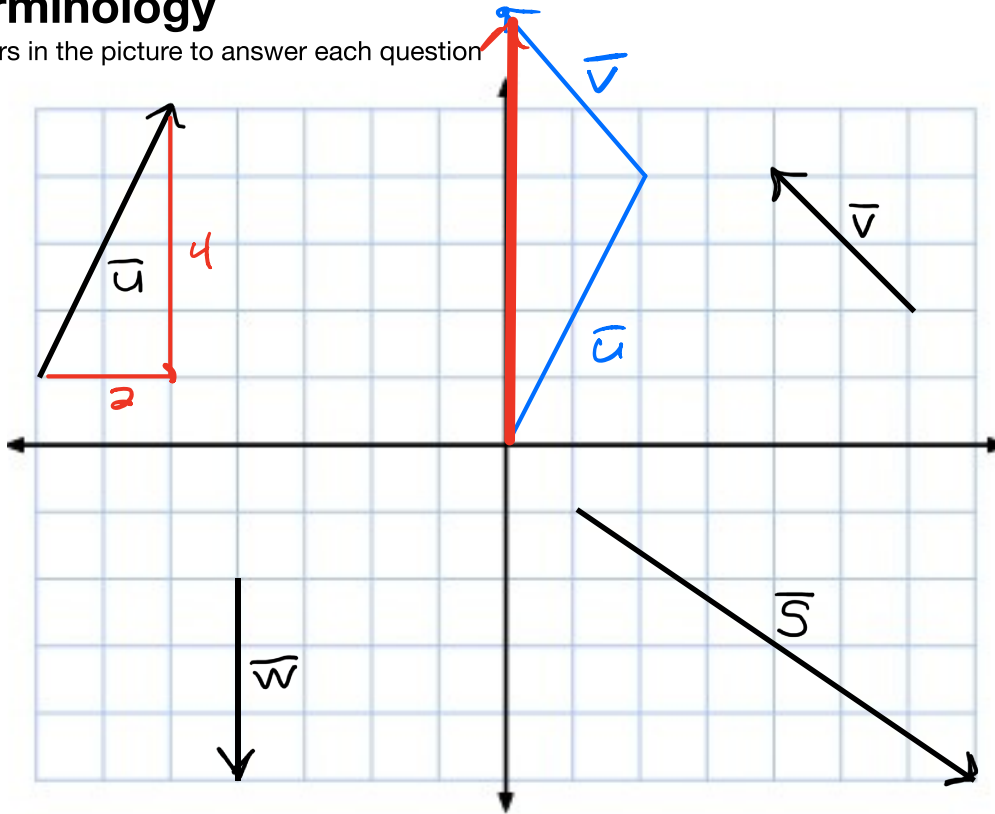


# V1 - Terminology

Use the vectors in the picture to answer each question



Find the vector components for each vector.

1.  $\vec{v} = \langle -2, 2 \rangle$

2.  $\vec{u} = \langle 2, 4 \rangle$

3.  $\vec{w} = \langle 0, -3 \rangle$

4.  $\vec{s} = \langle 6, -4 \rangle$

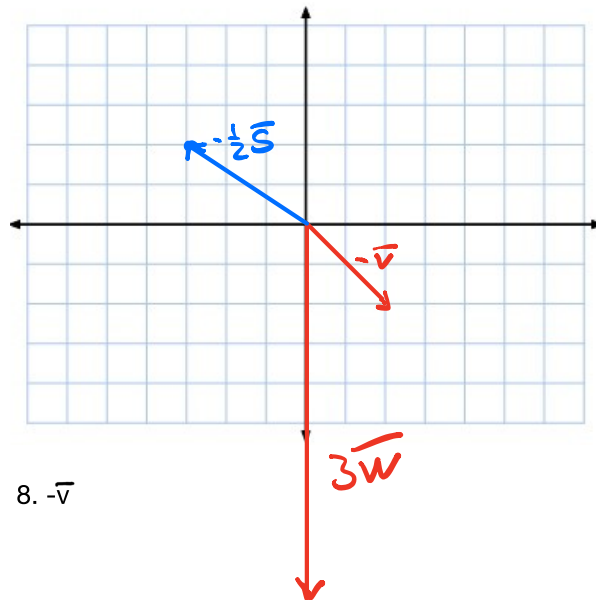
Find each vector calculation algebraically or graphically.

5.  $\vec{u} + \vec{v} = \langle 0, 6 \rangle$

6.  $2\vec{w} + 3\vec{s} = 2\langle 0, -3 \rangle + 3\langle 6, -4 \rangle$   
 $= \langle 0, -6 \rangle + \langle 18, -12 \rangle$   
 $= \langle 18, -18 \rangle$

7.  $-10\vec{u} - 3\vec{v} = -10\langle 2, 4 \rangle + -3\langle -2, 2 \rangle$   
 $= \langle -20, -40 \rangle + \langle 6, -6 \rangle$   
 $= \langle -14, -46 \rangle$

Draw each vector on the coordinate plane below with its tail at the origin. Label the vector in the picture.



8.  $-\vec{v}$

9.  $3\vec{w}$

10.  $-\frac{1}{2}\vec{s}$