

This homework is from a different textbook. Please do #5-19 (odds).  
I will post a link to it on my website.

In Exercises 5–12, let  $P = (-2, 2)$ ,  $Q = (3, 4)$ ,  $R = (-2, 5)$ , and  $S = (2, -8)$ . Find the component form and magnitude of the vector.

5.  $\overrightarrow{PQ}$

6.  $\overrightarrow{RS}$

7.  $\overrightarrow{QR}$

8.  $\overrightarrow{PS}$

9.  $2\overrightarrow{QS}$

10.  $(\sqrt{2})\overrightarrow{PR}$

11.  $3\overrightarrow{QR} + \overrightarrow{PS}$

12.  $\overrightarrow{PS} - 3\overrightarrow{PQ}$

In Exercises 13–20, let  $\mathbf{u} = \langle -1, 3 \rangle$ ,  $\mathbf{v} = \langle 2, 4 \rangle$ , and  $\mathbf{w} = \langle 2, -5 \rangle$ .  
Find the component form of the vector.

13.  $\mathbf{u} + \mathbf{v}$

14.  $\mathbf{u} + (-1)\mathbf{v}$

15.  $\mathbf{u} - \mathbf{w}$

16.  $3\mathbf{v}$

17.  $2\mathbf{u} + 3\mathbf{w}$

18.  $2\mathbf{u} - 4\mathbf{v}$

19.  $-2\mathbf{u} - 3\mathbf{v}$

20.  $-\mathbf{u} - \mathbf{v}$