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### 4.1 Notetaking with Vocabulary

## Extra Practice

In Exercises 1-3, name the vector and write its component form.
1.

2.

3.


In Exercises 4-7, the vertices of $\triangle A B C$ are $A(1,2), B(5,1), C(5,4)$.
Translate $\triangle A B C$ using the given vector. Graph $\triangle A B C$ and its image.
4. $\langle-4,0\rangle$
5. $\langle-2,-4\rangle$
6. $\langle 0,-5\rangle$
7. $\langle 1,-3\rangle$


In Exercises 8 and 9, write a rule for the translation of quadrilateral PQRS to quadrilateral $P^{\prime} Q^{\prime} R^{\prime} S^{\prime}$.
8.

9.


In Exercises 10 and 11, use the translation.
$(x, y) \rightarrow(x+6, y-3)$
10. What is the image of $J(4,5)$ ?
11. What is the image of $R^{\prime}(0,-5)$ ?

