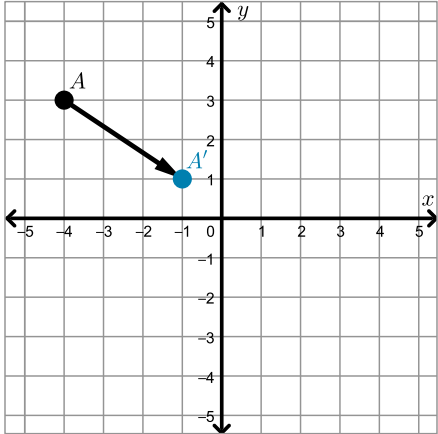
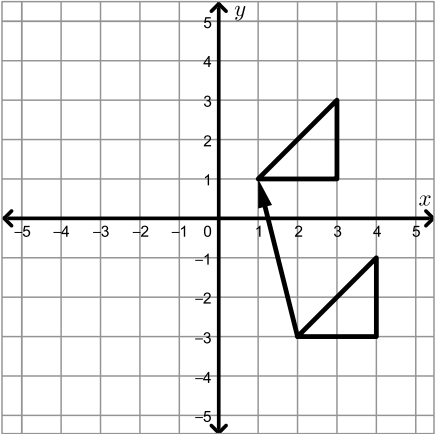
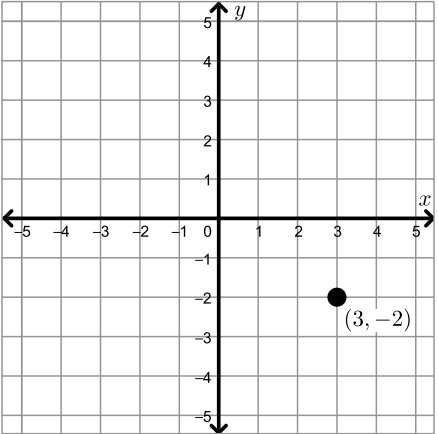


Vector

Examples & Non-Examples

| Example | Example | Non-Example |
|---|--|---|
| <p data-bbox="272 310 391 348">$\langle 3, -2 \rangle$</p>  | <p data-bbox="753 310 872 348">$\langle -1, 4 \rangle$</p>  | <p data-bbox="1230 310 1349 348">$(3, -2)$</p>  |

Definition

A **vector** is a quantity in Geometry that has both **magnitude** (length) and **direction**. It represents the **movement** from one point to another.

Key Points:

- A vector is often written as $\langle a, b \rangle$, where:
 - a is the horizontal change (left/right)
 - b is the vertical change (up/down)
- Vectors are commonly used to describe **translations**.
- They can be **graphed as arrows** that start at one point and point to another, showing the **direction and distance** of movement.
- Vectors are **not fixed in position** — they describe movement, not location.

Example:

A vector $\langle 3, -2 \rangle$ moves a point **3 units right** and **2 units down**.

