

What Is an Angle?

Let's look for angles and find out ways to describe them.

Warm-up

Notice and Wonder: A Wall of Clocks

What do you notice? What do you wonder?



Activity 1

Tricky Figures

Work with a partner in this activity. Choose a role: A or B. Sit back to back, or use a divider to keep one partner from seeing the other partner's work.

Partner A:

- Your teacher will give you a card. Don't show it to your partner.
- Describe both images on the card—as clearly and precisely as possible—so that your partner can draw the same images.

Partner B:

- Your partner will describe 2 images. Listen carefully to the descriptions.
- Create the drawings as described. Follow the instructions as closely as possible.

1. Compare your drawings to the original images. Discuss:
 - How are your drawings and the original images alike? How are they different?
 - How would you improve the descriptions?
2. Switch roles. Repeat the directions with a new card.

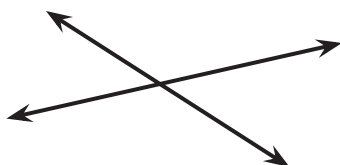
If you have time: Request two new cards from your teacher (one card at a time). Take turns describing and drawing the geometric figure on each card.

Activity 2

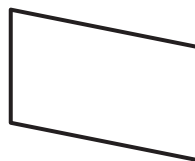
Angles or Not Angles?

1. Decide if each figure shows at least one angle. Explain or show your reasoning.

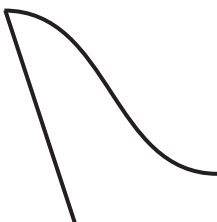
A



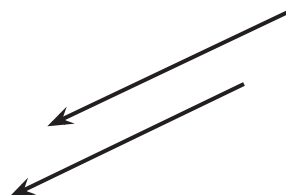
B



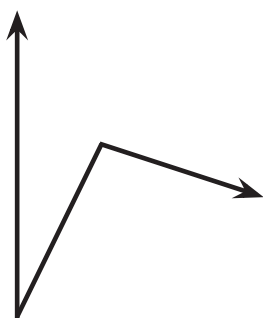
C



D



2. Clare and Kiran look at this diagram. Clare says there are no angles because the rays do not meet at a point. Kiran says he sees 2 angles.



Do you agree with Clare or Kiran? How many angles do you see?

Activity 3

Discover Angles

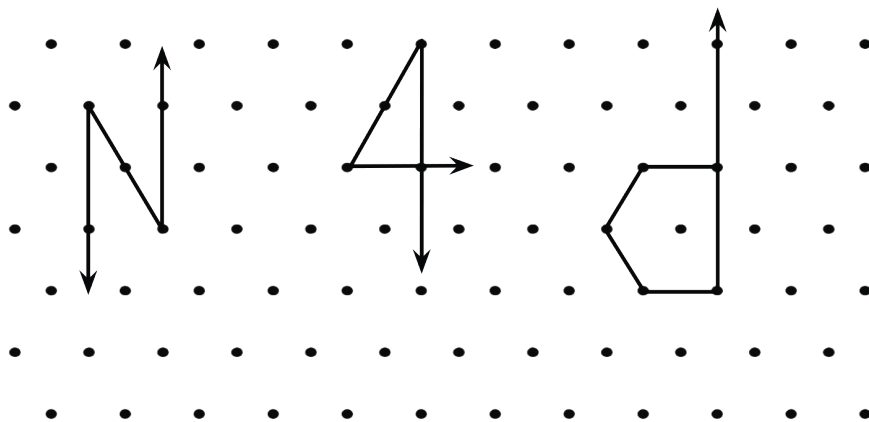
Here are two figures.



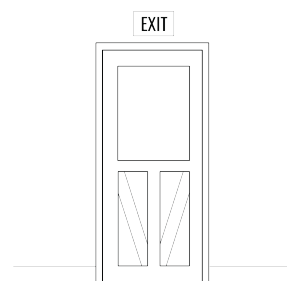
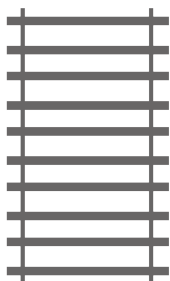
1. Find 2–3 angles in each figure. Draw pairs of rays to show the angles.
2. Sketch a part of your classroom that has 2–3 angles. Draw pairs of rays to show the angles.

Section A Summary

We learned the meaning of **point**, **line**, **line segment**, and **ray**. We used these terms to describe figures and geometric parts to create drawings.



We learned about lines that cross—**intersecting lines**—and lines that never cross—**parallel lines**. Then we looked for examples of intersecting lines, parallel lines, and line segments.



Finally, we learned that an **angle** is a figure made up of two rays that share the same starting point. The shared point is the **vertex** of the angle.

