Unit 7, Lesson 16

Angles, Streets, and Steps

Let's investigate streets and steps.

Warm-up

Notice and Wonder: Neighborhood Angles

What do you notice? What do you wonder?



Activity 1

How Steep Are These Streets?

1. In each case, draw a horizontal line and measure the angle that the street makes when it meets the horizontal line.

   a.



   b.



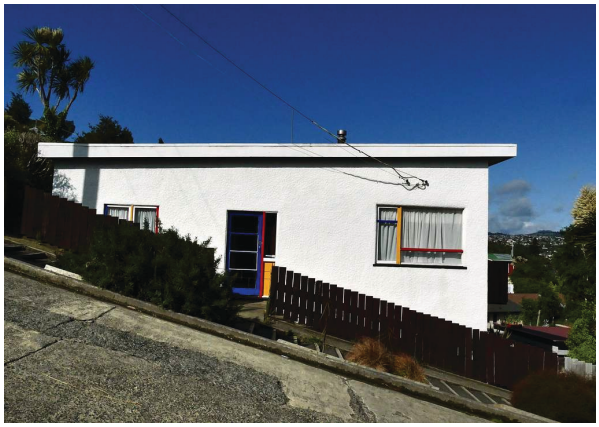
c.



d.



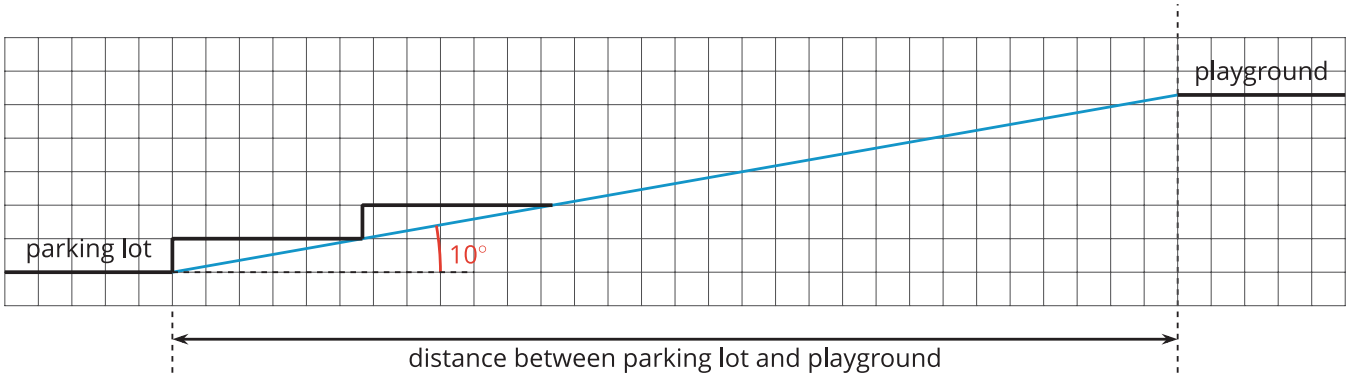
e.



2. How is living on a steep street different from living on a level or flat street? Think of as many differences as you can.

Activity 2

Steep Steps



A playground is on higher ground than its parking lot. The angle from the parking lot to the playground is 10°. Here's one way to build steps to get from the parking lot to the playground.

1. Create a drawing to show what the steps look like for the following angles from the parking lot to the playground. Make the height of each step 1 unit tall.
   a. 20°
   b. 25°
   c. an angle of your choice
2. How many steps are needed to get up from the parking lot to the playground for each angle?

3. At about what angle do you think the steps would be too steep or too hard to climb up? Explain or show your reasoning.