Unit 7, Lesson 12

Types of Angles

Let's look at different types of angles.

Warm-up

Number Talk: Fractions of 120 and 360

Find the value of each expression mentally.

- $12 \times \frac{1}{12}$
- $120 \times \frac{1}{12}$
- $360 \times \frac{1}{12}$
- $360 \times \frac{3}{12}$

Activity 1

Sorting Angles

In an earlier lesson, you and your partner drew some angles on cards.

Put the cards together and sort the angles into 2 groups. Explain your reasoning.

Activity 2

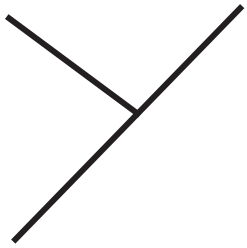
What Is It, Really?

1. Mai and Jada look at this drawing. Jada says it is a line. Mai says it is an angle.



Do you agree with Mai or Jada? Explain your reasoning.

2. Tyler and Andre measure an angle in this letter Y.



Andre said the angle he measured is obtuse. Tyler said the angle is acute.

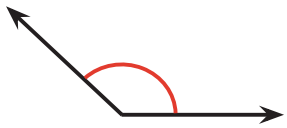
Explain why they could both be correct.

Activity 3

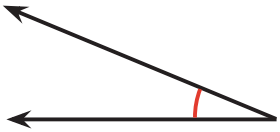
Small Angles, Large Angles

1. Identify each angle as acute, right, obtuse, or straight.

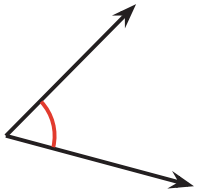
a.



b.



c.

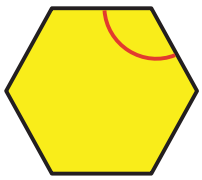


d. An angle formed by two 45° angles

e. A 91° angle

f. An angle that is in a rectangle

g.



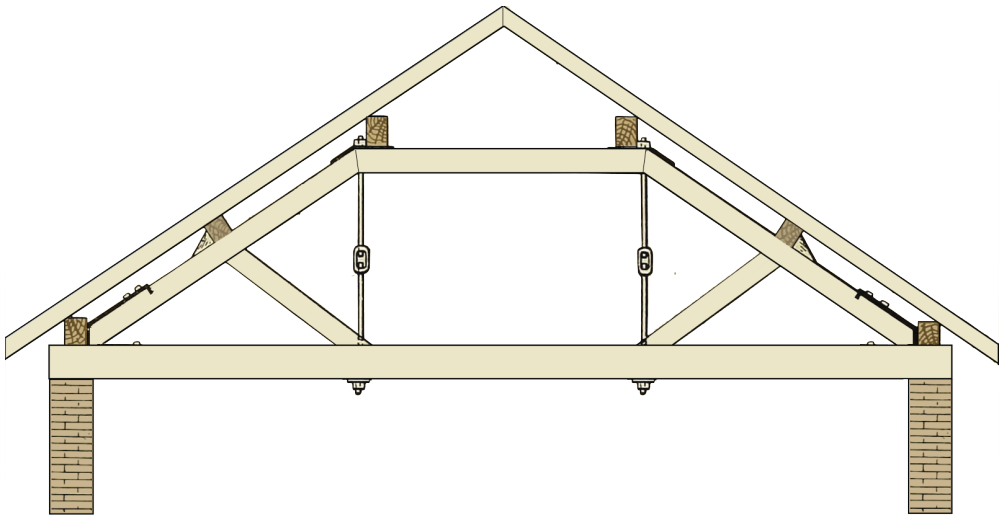
h.



i. An angle composed of two right angles

j. An angle composed of five 12° angles

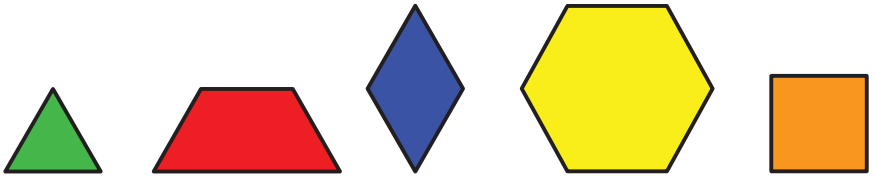
2. Here is a drawing of the structure of a roof.



Find as many acute and obtuse angles as you can in the drawing.

Use an "A" to label acute angles, a square (□) for right angles, and an "O" for obtuse angles.

3.



a. Diego chooses a pattern block that has 2 acute angles and 2 obtuse angles. Which pattern block does Diego choose?

b. He then chooses a pattern block with no obtuse angles. Which pattern block does he choose? Explain your reasoning.