

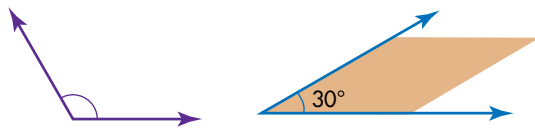
Homework & Practice 15-3

Measure with Unit Angles

Another Look!

The smaller angle of the tan pattern block measures 30° .

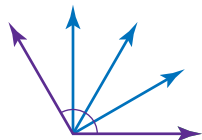
Use the tan pattern block to find the measure of the angle below.



You can use an angle you know to find the measure of an angle you do not know.



Four of the 30° angles will fit into the angle.

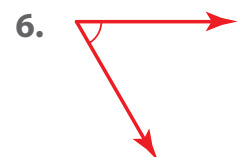
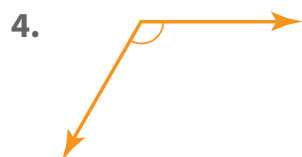
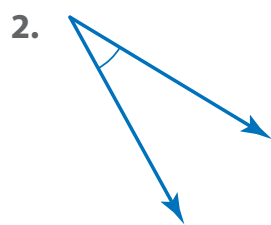
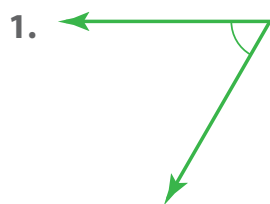
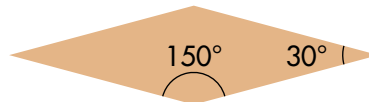
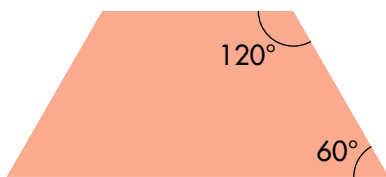


$$30^\circ + 30^\circ + 30^\circ + 30^\circ = 120^\circ$$

The measure of this angle is 120° .

It turns through 120 one-degree angles.

For 1–6, find the measure of each angle. Use pattern blocks to help.



7. **MP.3 Construct Arguments** A round classroom table is made from 5 identical wedges. What is the measure of each angle formed at the center of the classroom table? Explain.

8. **MP.8 Generalize** How many unit angles does the smaller angle of a tan pattern block turn through? Explain.

9. Mario cut a circular pizza into 9 equal slices. He put a slice of pizza on each of 5 plates. What is the measure for the angle of the slices that are left?

10. **Number Sense** How many 30° angles are there in a 150° angle? Use repeated subtraction to solve. Draw a picture to justify your solution.

11. Matt's parents pay him \$5.50 for each half hour he babysits his sister, plus a two dollar tip. If Matt made \$18.50, for how long did he babysit?

12. **Higher Order Thinking** If a clock face reads 1:00, how many hours must pass for the hands to form a straight angle?

Common Core Assessment

13. Shirley uses pattern blocks to measure the straight angle. Select all the combinations of pattern block angles that Shirley could use to measure the angle.

- 6 small angles on the tan pattern block
- 1 large angle and one small angle on the red pattern block
- 1 large angle on the red pattern block and 3 small angles on the tan pattern block
- 4 small angles on the tan pattern block and one small angle on the red pattern block
- 2 large angles on the red pattern block

