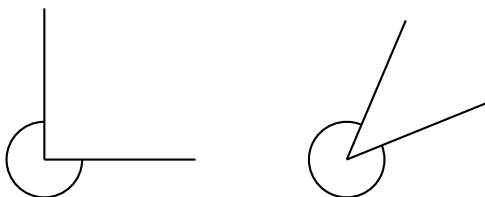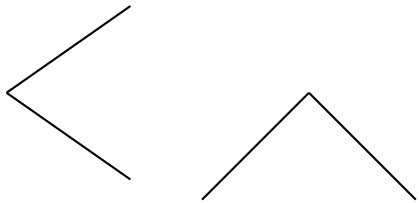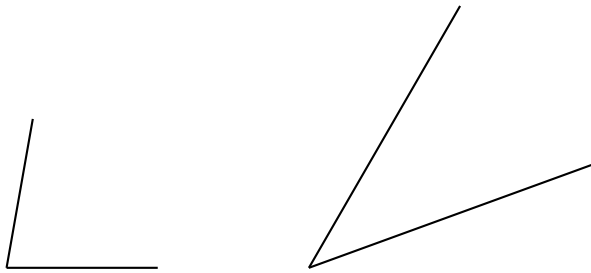NAME:_____

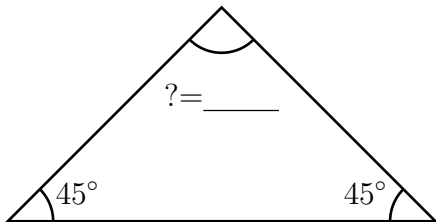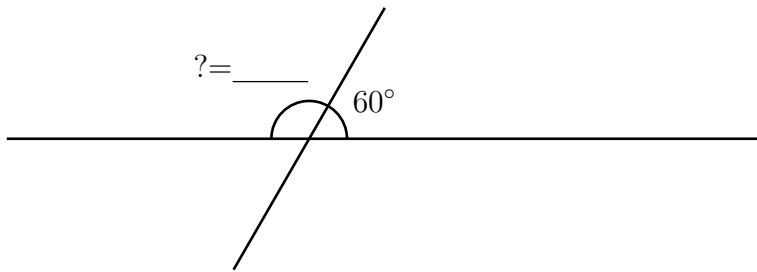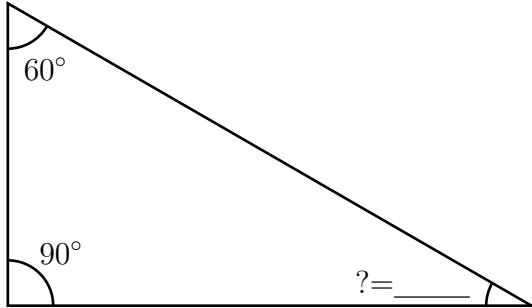1. What is an angle? Try to explain with words.

2. Draw an angle

3. Draw a bigger angle. Explain why it is bigger.

4. Which angle is bigger in each pair? Circle the one you think is biggest.

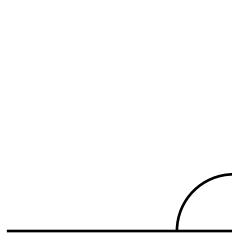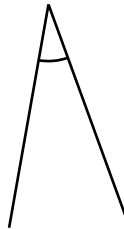5. How big is the missing angle measurement? Write the answer on the line.

60°

90°   ?=_____

?=_____   60°

?=_____

45°   45°

How did you find the answer?

_____

_____

6. Estimate the angles

☐ 30°
☐ 60°
☐ 90°
☐ 120°
☐ 180°
☐ 270°
☐ 330°

☐ 30°
☐ 60°
☐ 90°
☐ 120°
☐ 180°
☐ 270°
☐ 330°

Write an estimate

_____

Write an estimate

_____
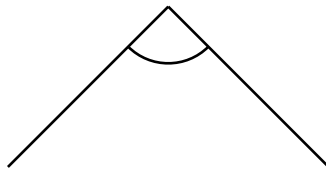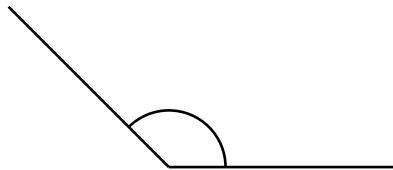
How did you estimate this angle?

_____

_____

7. Estimate the angles

☐   30°
☐   60°
☐   90°
☐   120°
☐   180°
☐   270°
☐   330°

☐   30°
☐   60°
☐   90°
☐   120°
☐   180°
☐   270°
☐   330°

Write an estimate

———————

Write an estimate

———————
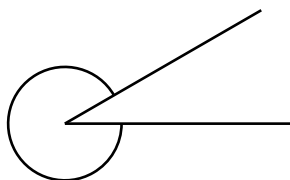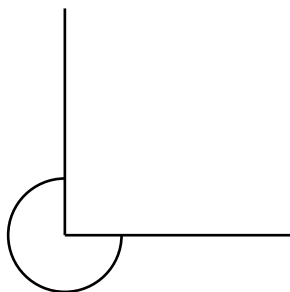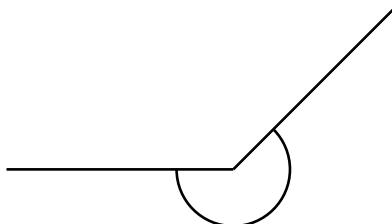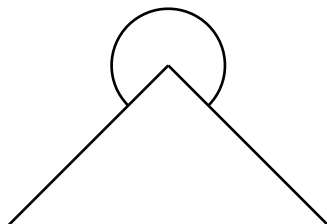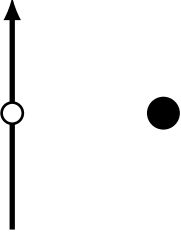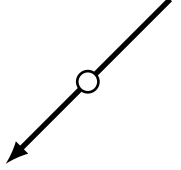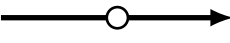
How did you estimate this angle?

_____

_____

8. How many degrees and in which direction (right or left) should you turn the spinner arrow to aim it directly at the center of the black dot? Circle the direction you choose and write how many degrees on the line.

LEFT / RIGHT

How many degrees?

_____

LEFT / RIGHT

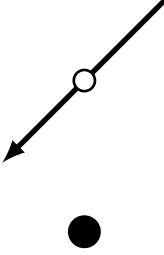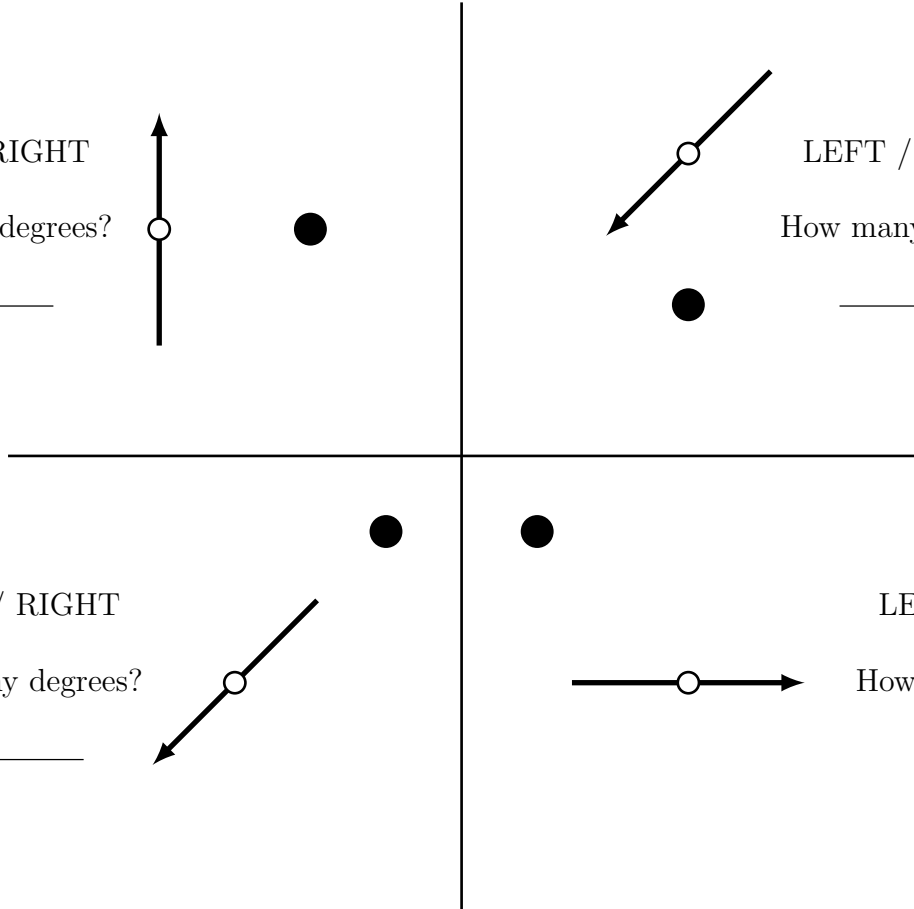How many degrees?

_____

LEFT / RIGHT

How many degrees?

_____

LEFT / RIGHT

How many degrees?

_____

How did you think when you solved these tasks?

_____

_____

9. A robot turns 30 degrees every time it turns. How many turns must the robot make before it is facing in the same direction as it was when it started? How did you get your answer?

10. A robot turns 40 degrees left, then it turns 20 degrees right and then 30 degrees left. How far and in what direction has the robot turned in total from where it started? How did you get your answer?

11. Do you think you can learn about angles and degrees using robotics?