

Basics of Geometry

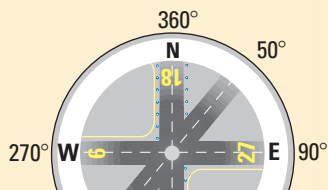
How are runways named?

Runways are named based on the angles they form with due north, measured in a clockwise direction. These angles are called *bearings*. To determine the runway number, the bearing is divided by 10.

The plane in the diagram has a bearing of 50° .

$$50 \div 10 = 5$$

It is on runway 5.



Learn More About It

You will learn more about airport runways in Exercises 40–44 on p. 40.





Who uses Basics of Geometry?



SURVEYOR

Surveyors use angles to determine boundaries for roads, cell phone towers, and buildings. They also help determine safe speed limits on roads. (p. 39)

SCIENTIST

Scientists make observations, look for patterns, and use previous experiences to develop conjectures that can be tested. (p. 9)



How will you use these ideas?

- Understand how the Braille alphabet works. (p. 7)
- Predict when a full moon will occur. (p. 12)
- Understand why all tires of a three-wheeled car always touch the ground. (p. 19)
- Sketch intersecting lines in a perspective drawing. (p. 27)
- Use angle measures to locate cities by longitude. (p. 40)