



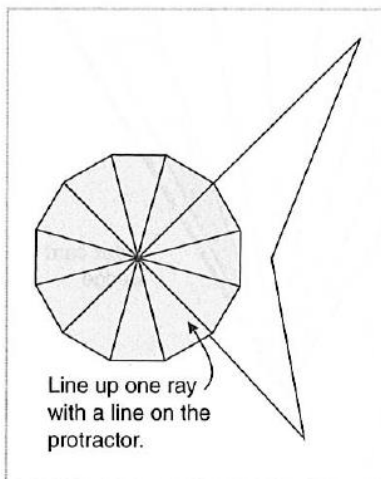
Activity 14.7 ANGLE SUMS OF POLYGONS



Ask students what they think the sum of the angles in a quadrilateral (or triangle or other polygon) might be. Collect their conjectures. Explain that students are going to investigate this question and report back what they learn. To do this, they must measure as many different kinds of quadrilaterals as they can. (Students may choose to draw the quadrilaterals, to build them on a geoboard or to create them by using short pieces of uncooked spaghetti as sides and taping them down.) Discuss with students the types of shapes they might include, including concave and convex shapes (Figure 14.5). For students with special needs, you may prepare a page of quadrilaterals with different shapes, rather than having them generate the shapes. Students use their wax paper protractor (or angle ruler) to measure the angles.

Figure 14.5

Measuring quadrilaterals with a homemade protractor.



From Van de Walle et. al. (2014). *Teaching Student-Centered Mathematics Grades: Developmentally Appropriate Instruction for Grades 6 – 8 (2nd Ed.)*. Toronto: Pearson Education, Inc. (p. 306).