

36 Football—Geometry

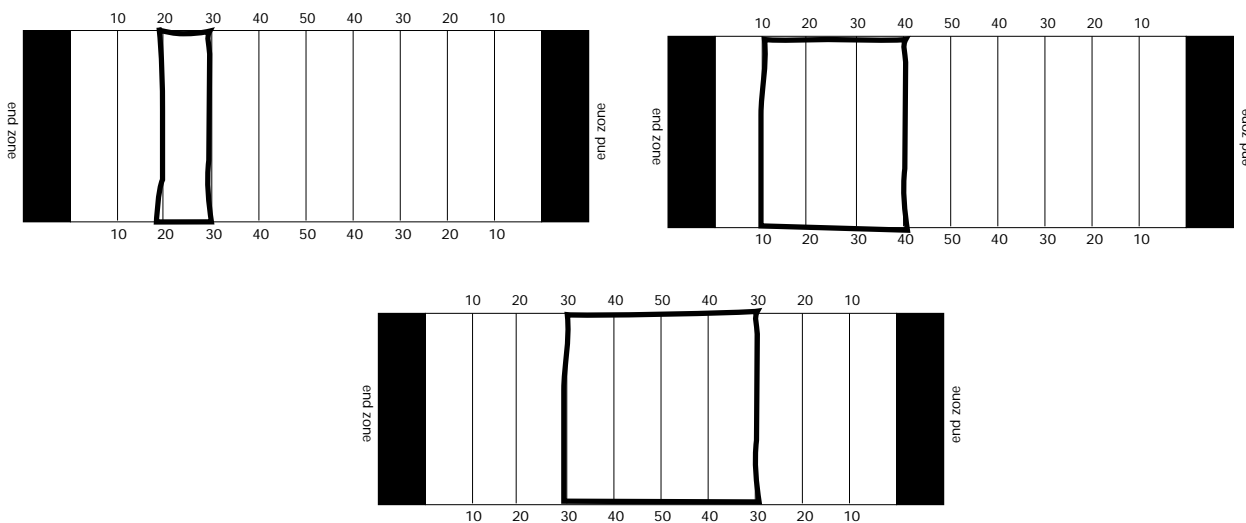
You Will Need

- Chapter 11, Geometry
- a transparency of Blackline 59 (Football Field)
- at least 3 copies Blackline 79 (Football Field Recording Sheet) for each pair of children

Your Lesson

How many rectangles can be found on a football field?

Begin an exploration of this question by displaying a transparency of a football field and inviting volunteers to indicate some of the rectangles they see. Students can record these answers on Blackline 79.



Now have students work in pairs as they go on a rectangle hunt. How many rectangles can each team find? How can a count of the rectangles be systematically made? Teams should shade or outline the rectangles that are found on Blackline 79. At the end, have teams share their counting strategies with the class.

Teacher Tips

Some teams may generate rectangles in a random way. Others may find ways to organize their work. One strategy is to count rectangles in order, according to their dimensions. That is, first tally those 10 yards wide; then those 20 yards wide; etc.

Have your local band director speak to your class about band formations on the football field. How do they use shapes to plan a half-time performance?

Note: For Lesson 37, you may want to adjust the lesson and ask the children to bring in a variety of footballs (small plastic ones given away as promotions, sponge footballs, pee-wee, regulation size, etc.) or other balls (tennis, soccer, golf, etc.).

Also, remind your children to continue gathering data for the coin-tossing experiment announced yesterday.