

ACTIVITY 1 Equations of Circles



Equipment Carpenter's square
Masking tape
String
Tape measure
Graph paper

Problem Statement

You will find equations that describe midcourt and freethrow circles on a basketball court. You will use the equations to calculate coordinates of points on the circles.

Procedure

- a** Select two intersecting boundary lines of the basketball court to serve as axes for an xy -coordinate system. Label the axes with masking tape. Sketch the basketball court on graph paper, and label the x - and y -axes on the sketch. Sketch the free throw circles and label their centers A and C . Sketch the concentric circles at midcourt, and label their center B .
- b** The lines on the floor of the basketball court are about 2 inches wide. Decide if your group will measure distances on the floor from the inside, outside, or center of the lines. Use the same relative position on the lines for all measurements.

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