Problem Card 1

A circle has a shaded sector. Your partner has some information about the circle and its sector.

Find the area of the circle.

Data Card 1

- The sector's central angle measures 240 degrees.
- The area of the sector is 54π square feet.
- The length of the arc defined by the sector is 12π feet.

Problem Card 2

A circle has a shaded sector. Your partner has some information about the circle and its sector.

Find the circumference of the circle.

Data Card 2

- The sector's central angle measures 144 degrees.
- The length of the arc defined by the sector is 8π feet.
- The area of the sector is 40π square feet.