**Application Exercise 1**

A grass quadrangle measures 20 × 40m.

Sprinklers with a maximum watering radius of 5m are to be installed (half and quarter sprinklers are available).

How many sprinklers should be installed to water the quadrangle?

(A) 8   (B) 13   (C) 15   (D) 20

Application Exercise 2

Which of these hand-drawings is the best circle?

(A)
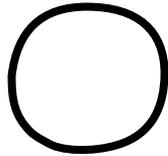
P = 63 mm
A = 309 mm^2

(B)
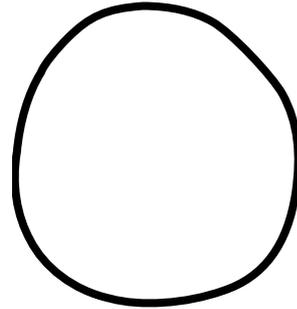
P = 124 mm
A = 1218 mm^2

(C)
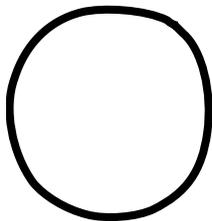
P = 91 mm
A = 655 mm^2

(D)
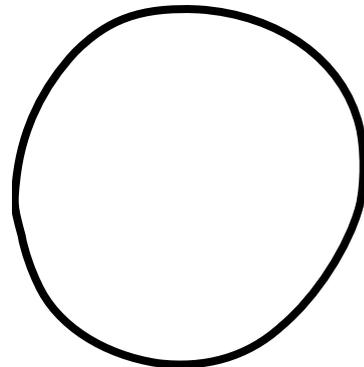
P = 149 mm
A = 1753 mm^2

Minimum evidence: Show how qualities and measurable properties of a circle may be used to rank the drawings. Some measurements are provided.