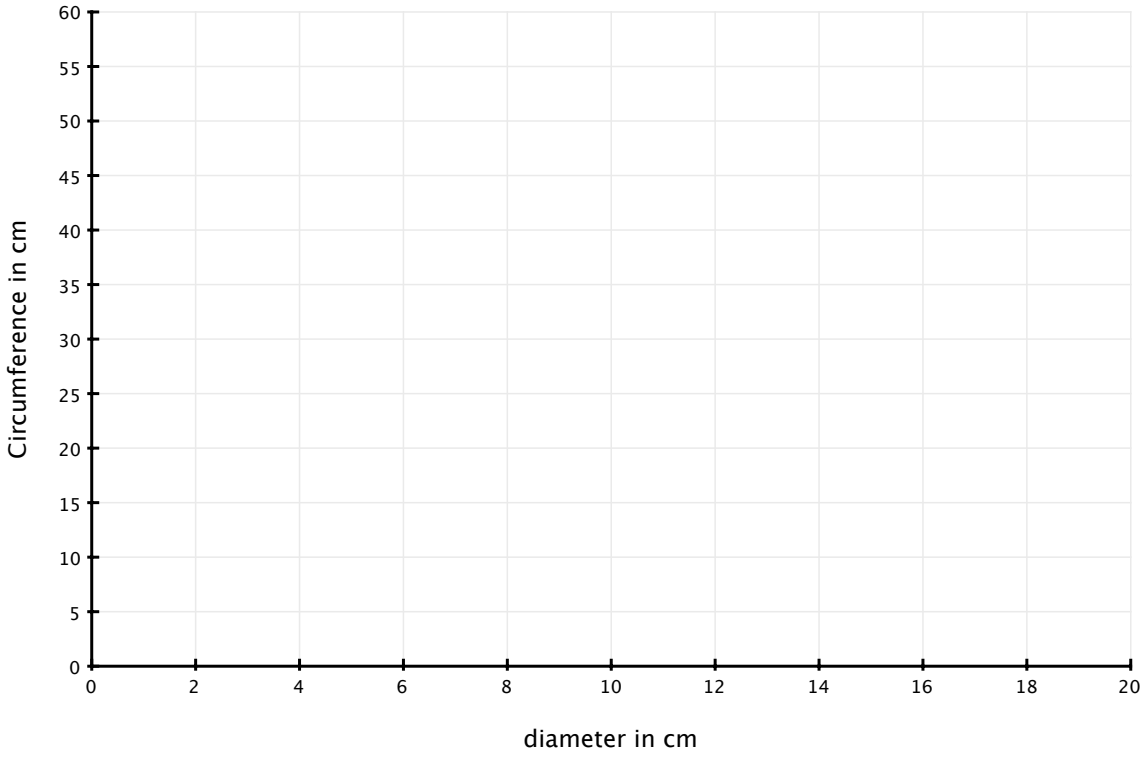
1. Below is a table listing the circumference and diameter of several objects. Graph these values on the grid using the horizontal axis for diameter and the vertical axis for circumference.

Object	Circumference	Diameter
CD case	40.1 cm	12.5 cm
Coffee mug	25.3 cm	8.0 cm
Salad plate	55.8 cm	17.9 cm
Pencil top	2.2 cm	0.7 cm
Penny	6.3 cm	2.0 cm
Quarter	7.7 cm	2.4 cm
Lotion bottle	11.4 cm	3.4 cm
Water bottle	22.6 cm	7.0 cm



Describe your graph. What does your graph tell you about the relationship between circumference and diameter?

2. Mr. Garcia gave the following problem to students in his math class.

> A decorative fountain pool at school has a diameter of 28 feet. What is the approximate circumference of the pool? What is the approximate area?

Mr. Garcia's students gave the following answers. Explain whether or not the answers are reasonable estimates.

Student A: C ≈ 90 ft. A ≈ 2700 sq. ft.

Student B: C ≈ 84 ft. A ≈ 600 sq. ft.

Student C: C ≈ 150 ft. A ≈ 600 ft.

Student D: C = 87.92 ft. A = 615.44 sq. ft.