

Exercise 112

The admissions office at a public university estimates that 65% of the students offered admission to the class of 2019 will actually enroll.

- Find the linear function $y = N(x)$, where N is the number of students that actually enroll and x is the number of all students offered admission to the class of 2019.
 - If the university wants the 2019 freshman class size to be 1350, determine how many students should be admitted.
-

Solution

Part (a)

The linear function is

$$N(x) = 0.65x.$$

Part (b)

Set $N(x) = 1350$ and solve the equation for x .

$$N(x) = 0.65x = 1350$$

$$x = \frac{1350}{0.65} \approx 2077$$

The university should admit roughly 2077 students.