In this problem, you will investigate graphs of equations.
The Student Council is planning a trip to an amusement park.
The table shows the bus price to travel to each park and the admission price per student.

Park	Bus Fee ($)	Admission Price Per Student ($)
Wild Waves	$200	$15
Coaster Heaven	$250	$10

a) Write an equation to represent the total cost (y) for x students at each park.

$y = 15x + 200$

$y = 10x + 250$

b) Graph the two equations on the same coordinate plane. For how many students is the cost of both trips the same? Explain how the graph shows this.

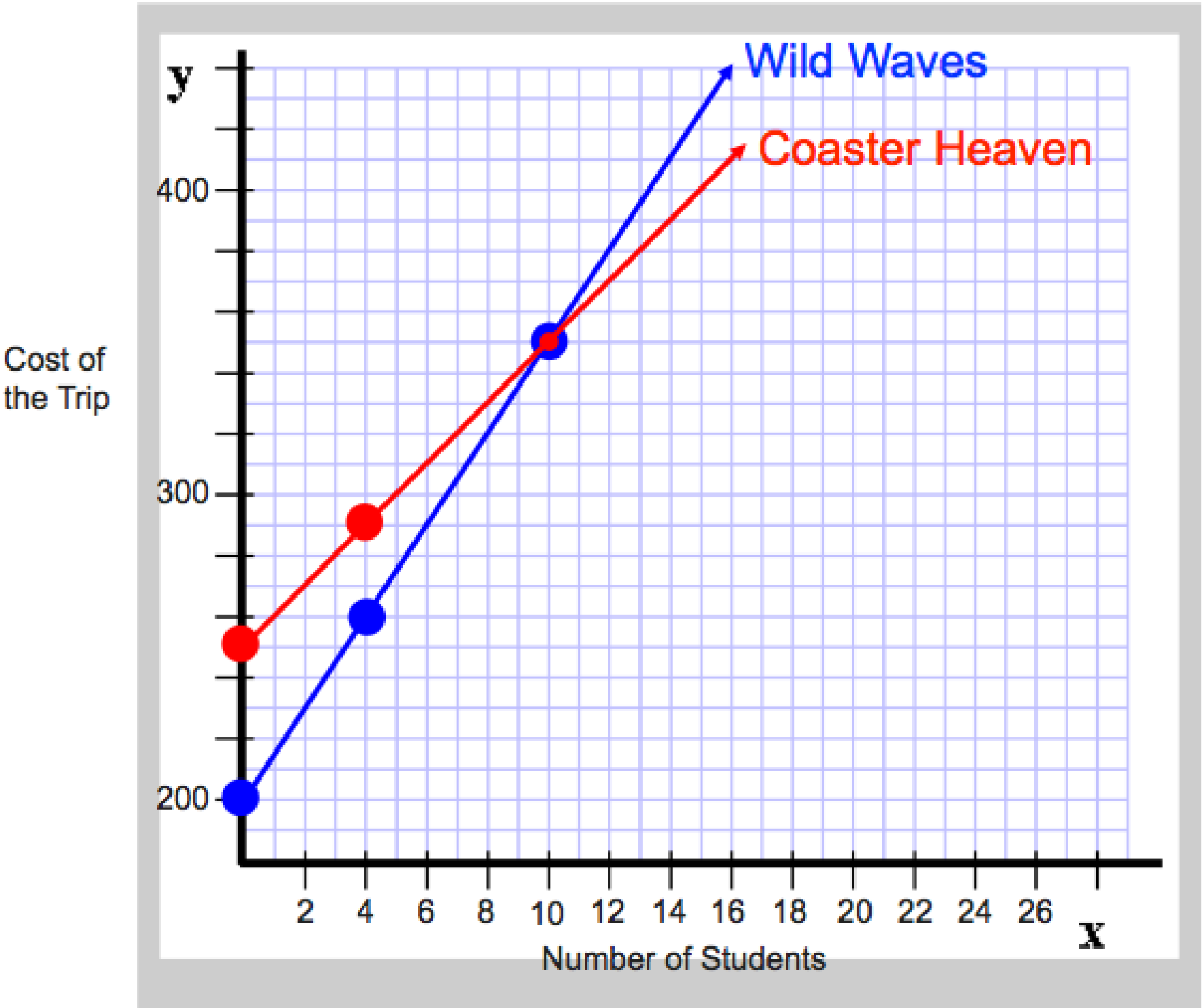
At 10 students, both trips cost $350. On the graph, it is the location where both lines intersect or cross.

c) If 15 students decide to take the trip, which trip will cost less? How does the graph show this?

Coaster Heaven because the point for the cost of 15 students on the line is below Wild Waves which means less cost.

d) If 8 students decide to take the trip, which trip will cost less? How does the graph show this?

Wild Waves because the point for the cost of 8 students on the line is below Coaster Heaven, which means less cost.


Wild Waves
Coaster Heaven
y
400
300
200
Cost of the Trip
2
4
6
8
10
12
14
16
18
20
22
24
26
x
Number of Students