

Shaun O'Malley
Lesson 11 Answers

Problem #1

Student ID	High School GPA	ACT Score	Predicted First Year GPA
1	2.1	27	2.48
2	3.78	25	3.29
3	3.25	31	3.38
4	2.69	19	2.28
5	1.7	18	1.66

Students 5, 4, 1 are most at risk and in that order.

Problem #2

Student ID	High School GPA	ACT Score	Predicted First Year GPA	Actual First Year GPA
1	2.1	27	2.48	3.46
2	3.78	25	3.29	3.19
3	3.25	31	3.38	3.40
4	2.69	19	2.28	2.51
5	1.7	18	1.66	1.25

I would say that Student #1 did surprisingly well. They not only did way better than their predicted first year GPA but they did better than in High School for whatever reason (as a student affairs practitioner, one would hope that is because they have grown and developed and applied themselves more and that the institution offered plenty of resources to do well and be successful). I would also say that student 2 and 3 did pretty much as predicted and it would show that even with transition to college they were able to maintain a good college GPA. Most people that do well in high school struggle in college, so it is good to see that they have still managed to keep a pretty high GPA. I would also say student #4 managed to do well to considering how they scored on their GPA and high school GPA, even with all of the transitions college brings, they are out performing their predicted GPA and keeping their GPA close to how they did in High School.

Problem #3

Department ID	Student/Faculty Ratio	Academic Index	Percent Remedial	Predicted 6-year Grad Rate
1	25	3.1	9	62.20719
2	12	3.6	6	82.13874
3	16	2.8	8	66.36422
4	30	2.4	13	43.83016
5	23	2.2	15	43.11898

Departments 5 and 4 have the lowest graduation rates, respectively followed by 1, 3, and then 2.

Problem #4

Department ID	Student/Faculty Ratio	Academic Index	Percent Remedial	Actual 6-year grad rates	Predicted 6-year Grad Rate
1	25	3.1	9	58.34	62.20719
2	12	3.6	6	75.64	82.13874
3	16	2.8	8	67.12	66.36422
4	30	2.4	13	40.69	43.83016
5	23	2.2	15	65.81	43.11898

I would say that the students in Department 5 did the best because they are way above the predicted 6-year grad rate verses actual. I would say the students in department 3 were about average and students in department 1, 2, and 4 performed less than the predicted rates.