CHAPTER 1 PROJECT



Polynomials

A chemistry professor calculates final grades for her class using the polynomial

$$A = 0.3f + 0.15h + 0.4t + 0.15p,$$

where A is the final grade, f is the final exam, h is the homework average, t is the chapter test average, and p is the semester project.

The following is a table containing the grades for various students in the class.

Name	Final Exam	Homework Avg.	Test Avg.	Project
Alex	77	95	79	85
Ashley	91	95	88	90
Barron	82	85	81	75
Elizabeth	75	100	84	80
Gabe	94	90	90	85
Lynn	88	85	80	75

- 1. Find the final grade for each student, rounded to one decimal place.
- 2. Who has the highest total score?
- **3.** Why is the final grade raised more with a grade of 100 on the final exam than with a grade of 100 on the semester project?
- **4.** Assume you are a student in this class. With one week until the final exam, you have a homework average of 85, a test average of 85, and a 95 on the semester project. What score must you make on the final exam to achieve at least a 90.0 overall? Round your answer to one decimal place.