

► Math and Gymnastics

In a gymnastics competition, gymnasts compete in events such as the balance beam, parallel bars, vault, and floor exercise.

Leigh earned the following scores from the judges for her balance beam routine.

9.20 9.30 9.20 9.30 9.20 9.00

Follow these steps to find Leigh's final score.

1. Order the scores from least to greatest.

2. Cross off the lowest score and the highest score.

3. Find the average of the remaining scores by adding the scores and dividing the sum by 4.

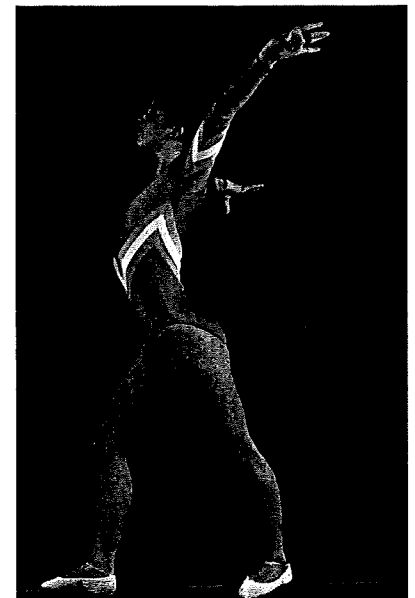
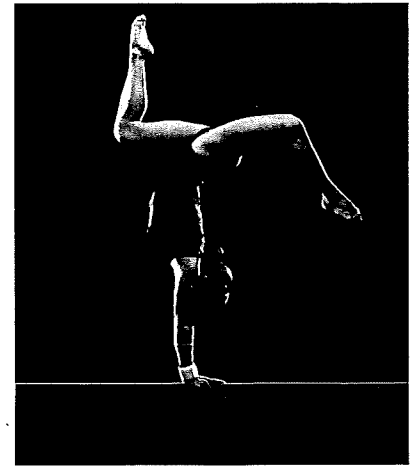
4. Calculate Leigh's final score by adding 7.0 (the difficulty rating of her routine) to the average you found in Exercise 3.

The judges' scores for Olivia's balance beam routine are shown below.

9.40 9.40 9.50 9.50 9.40 9.40

5. Calculate Olivia's average score by following the steps described in Exercises 1–3 above.

6. Calculate Olivia's final score by adding 6.6 (the difficulty of her routine) to the average you found in Exercise 5.





► Math and Diving

In diving competitions, divers compete in springboard and platform events.

Follow these steps to find the total score for a dive.

- Order the judges' scores from least to greatest.
- Cross off the lowest score and the highest score.
- Find the sum of the remaining scores.
- Multiply the sum by the difficulty of the dive.

7. Suppose a diver earned the following scores from judges on his first of five platform dives.

9.5 10.0 9.0 10.0 10.0

- a. In the space at the right, sketch a bar graph to display the scores.
- b. The difficulty of the dive was 3.8. Follow the steps above to calculate the total score for the dive.

8. The table below shows the scores the diver received from the judges for his four remaining dives.

Dive	Scores	Difficulty
2	9.4 8.9 9.0 9.5 9.4	3.2
3	8.8 8.6 8.0 8.0 8.5	3.5
4	9.6 9.5 9.5 9.6 9.4	2.8
5	7.0 7.5 6.5 7.5 7.0	3.0

For each dive, follow the steps above to calculate the dive's total score.

- a. Dive 2 total score: _____
- b. Dive 3 total score: _____
- c. Dive 4 total score: _____
- d. Dive 5 total score: _____

9. How many points altogether were scored on the five dives?

