

Mix It Up

1. Fifty-five percent of students at High Street Academy and 35% of the students at Terrace Prep are female. The schools combine to form Terrace High. Which of the following could represent the percent of females in the combined school?

90% 75% 55% 50% 45% 35% 30% 20%

Choose all that apply. Explain how you know.

2. For the merger above, what can you conclude about the relative sizes of High St. Academy and Terrace Prep if the combined school is 52% female? ...45% female? Explain.
3. In Division A, 75% of the employees are full-time; in Division B, 25% are full-time. If 74% in A and B combined are full-time employees, which division is larger? Does the larger division have a lot more employees or just a few more? How do you know?

4. Describe how you could get a 60% final mixture by combining a 40% concentration with an 80% concentration.
5. Explain why it is impossible to get a 39% final mixture when combining a 40% concentration with an 80% concentration.
6. If you combined a 40% concentration with an 80% concentration and got a final mixture of 79%, what can you say about the relative amounts that come from each original mixture?

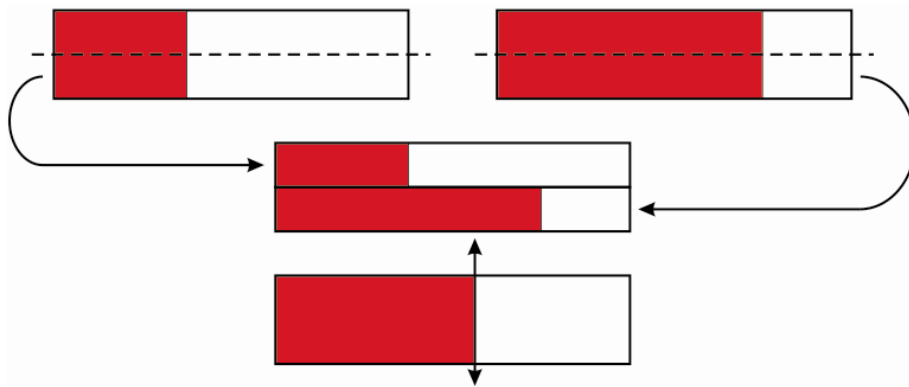


Mixture A

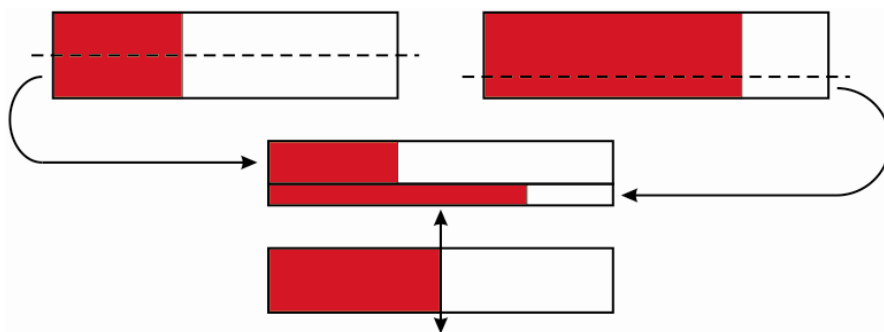


Mixture B

Equal slices:



Thicker slice of A:



Thicker slice of B:

