

1. You make 24 ounces of Kool-Aid that is 85% Kool-Aid and 15% water. How much water do you need to add for the Kool-Aid to have only 55% Kool-Aid and 45% water?
2. The next day you make Kool-Aid again. This time you make 33 ounces that is 53% Kool-Aid and 47% water. How much pure Kool-Aid do you need to add to have 65% Kool-Aid and 35% water?
3. The Kool-Aid was for your volleyball team. Your team has 20 wins and 10 losses. How many consecutive games do you need to win so that your winning record reaches over 75% ?
4. Your little brother's baseball team has 20 wins and 5 losses!! As long as his team's winning record is above 60% , they make the playoffs. If they go on a losing streak, how many consecutive games can they lose and still make the playoffs?
5. Larry really needs at least 80% on the final exam for his semester grade to be an A (his parents promised him a NEW bicycle if he got an A!). So far he has 15 questions right and 10 wrong. If he answers correctly on every question for the rest of the final, at least how many more questions must there be to reach the 80% he needs?
6. On the other hand, if Larry gets below 50% on the final exam then his semester grade will drop to a C and his parents will take away his Smart Phone. So far he has 15 questions right and 10 wrong. If he answers every question wrong for the rest of the final, what is the most number of questions left on the final to keep his final exam grade above 50% ?
7. Hank has 20 gallons of a salad dressing that is 30% oil and wants to make it only 13% oil. How much oil does he need to remove in order to have his dressing only be 13% oil??
8. Hank instead decides to add vinegar to his salad dressing instead of removing oil. How much vinegar does he need to add in order to have his dressing only be 13% oil?
9. No joke, Mr Elliott weighs the equivalent to 22 gallons of water and is 26% body fat right now. If he is going to qualify for the World Ironman Championship, he needs to be below 6% body fat. How much body fat does he need to remove in order to reach his goal of 6% ?
10. Mr Elliott decides that removing body fat will take too much time and decides to get his body fat percentage down by chugging water. How much water does he need to drink to reach his goal of 6% ?