

Y9 U14 Ratio (Hard)

1. At a holiday camp, the ratio of boys to girls is 3:4 and the ratio of girls to adults is 5:7. What is the ratio of children to adults at the camp?
A 4:5 B 5:4 C 12:7 D 15:28 E 21:20
2. The ratio of cats to dogs at a rescue centre is 2 : 3. Of the cats, 25% are black and of the dogs, 50% are black. What **percentage** of the total animals are black?
3. On a school trip, the ratio of the number of teachers to the number of students is 1:15. The ratio of the number of male students to the number of female students is 7:5. Work out what percentage of all the people on the trip are female students. Give your answer correct to the nearest whole number.
4. A swimming club has three categories of members: junior, senior, veteran. The ratio of junior to senior members is 3:2 and the ratio of senior members to veterans is 5:2. Which of the following could be the total number of members in the swimming club? A 30 B 35 C 48 D 58 E 60
5. The ratio of boys to girls is 1 : 2. Two boys and two girls enter the room and the ratio is now 5 : 9. How many boys and girls were there originally?
6. The ratio of children to adults on a school trip is initially 10 : 1. This doesn't meet government regulations, so 5 more children and 5 more adults join the trip so that the ratio is now 9 : 1. How many children are there now?
7. A large pan contains a mixture of oil and water. After 2 litres of water are added to the original contents of the pan, the ratio of oil to water is 1:2. However, when 2 litres of oil are added to the new mixture, the ratio becomes 2:3. Find the original ratio of oil to water in the pan. **No space in between all numbers and signs.**
8. Anne, Becky and Charlotte had sums of money in the ratio 7:6:5. One of them gave £9 to one of the others and this changed the ratio (in the same order of names) to 6:5:4. The total sum of money remained the same; what was it?
Answer is a whole number, for example \$XXX