Name: *Ratios*	
Question 1 *When making an apple pie, 4 kilograms of apples are used in 1 pie.* *How much apple is used to make 6 pies?*	
Question 2 *A scale on a map is 1 centimetre equals 5 kilometres.* *How far are two towns apart if the map shows them as 7 centimetres apart?*	
Question 3 *A scale on a map is 1 centimetre equals 5 kilometres.* *If two towns are 50 kilometres apart, how far will it be on the map?*	
Question 4 *In a mixed basketball team there is a ratio of 3 boys for every 2 girls.* *How many boys are there if there are 6 girls?*	
Question 5 *When making a type of candy, there is a ratio of 3 kilograms of chocolate to 5 kilograms of fruit.* *If there was 12 kilograms of chocolate, how much fruit was used?*	
Question 6 *Jim found out that for every girl at school that liked broccoli, there were 3 girls that didn't like it.* *If a total of 300 girls didn't like broccoli, how many did like it?*	
Question 7 *The ratio of male to female birds in a bird cage was 5:3.* *For every 20 males how many females are there?*	
Question 8 *In the school election, for every 15 votes Randy got, Suzie got 7 votes.* *What is the ratio of votes for Suzie to votes for Randy?*	
Question 9 *At a carwash they use 1L of detergent for every 4 cars.* *How many cars can they wash with 20L of detergent?*	
Question 10 *The ratio of hotdogs sold to hamburgers sold was 10:7.* *If 120 hotdogs were sold, how many hamburgers were sold?*	

Ratios solutions

Question	Solution
Question 1 *When making an apple pie, 4 kilograms of apples are used in 1 pie.* *How much apple is used to make 6 pies?*	*Solution* *To calculate the amount of apple used to make 6 pies, use the ratio of 1:4. This means one apple pie uses 4kg of apples. For 6 pies it is 6:24. 6 pies would use* 24kg *of apples.*
Question 2 *A scale on a map is 1 centimetre equals 5 kilometres.* *How far are two towns apart if the map shows them as 7 centimetres apart?*	*Solution* *To calculate how far apart the two towns are apart, use the ratio of 1:5. 1 centimetre equals 5 kilometres. 7cm on the map equals 7 x 5km. The towns are* 35km *apart.*
Question 3 *A scale on a map is 1 centimetre equals 5 kilometres.* *If two towns are 50 kilometres apart, how far will it be on the map?*	*Solution* *To calculate the distance apart on the map, use the ratio of 1:5 which is equal to 10:50. 10cm is equal to 50km. That means they are* 10cm *apart on the map.*
Question 4 *In a mixed basketball team there is a ratio of 3 boys for every 2 girls.* *How many boys are there if there are 6 girls?*	*Solution* *To calculate the number of boys if there are 6 girls, the ratio of boys to girls is 3:2. That means for every 2 girls there will be 3 boys. If there are 6 girls, there will be* 9 boys.
Question 5 *When making a type of candy, there is a ratio of 3 kilograms of chocolate to 5 kilograms of fruit.* *If there was 12 kilograms of chocolate, how much fruit was used?*	*Solution* *To calculate the amount of fruit, use the ratio of chocolate to fruit which is 3:5. If 12kg of chocolate was used then that is 4 times the amount of chocolate which means there was 4 times the amount of fruit used. The ratios are 3:5 = 12:20.* 20kg *of fruit was used.*
Question 6 *Jim found out that for every girl at school that liked broccoli, there were 3 girls that didn't like it.* *If a total of 300 girls didn't like broccoli, how many did like it?*	*Solution* *To calculate the number of girls that do like broccoli, use the ratio of 3:1. That means for every 3 girls that didn't like broccoli, 1 girl did like it. For 300 girls, it is 300:? This is 300:100. Therefore* 100 girls *liked broccoli.*
Question 7 *The ratio of male to female birds in a bird cage was 5:3.* *For every 20 males how many females are there?*	*Solution* *To calculate the number of female birds, use the ratio of 5:3. For every 5 male birds there are 3 females. If there are 20 males then there would be* 12 females*. 20:12.*
Question 8 *In the school election, for every 15 votes Randy got, Suzie got 7 votes.* *What is the ratio of votes for Suzie to votes for Randy?*	*Solution* *To calculate the ratio of votes for Suzie to Randy, it is 7 votes to 15 votes. That is a ratio of* 7:15
Question 9 *At a carwash they use 1L of detergent for every 4 cars.* *How many cars can they wash with 20L of detergent?*	*Solution* *To calculate the number of cars that can be washed with 20L of detergent, use the ratio of 1:4. That is 20 times the amount of detergent which means they can wash 20 times the number of cars. For 20L they could wash* 80 cars*.*
Question 10 *The ratio of hotdogs sold to hamburgers sold was 10:7.* *If 120 hotdogs were sold, how many hamburgers were sold?*	*Solution* *To calculate the number of hamburgers sold, use the ratio of 10:7. That means for every 10 hotdogs that were sold, there were 7 hamburgers sold. 120 hotdogs means 84 hamburgers were sold. 120:84* 84 *hamburgers were sold.*