

1. Find the value of x in the equivalent ratio
 - a. $2 : 5 \equiv x : 10$
 - b. $3 : 2 \equiv 12 : x$
 - c. $2 : x \equiv 16 : 4$
 - d. $x : 6 \equiv 6 : 12$
 - e. $2 : 20 \equiv x : 10$
2. Share the quantity stated in the stated ratio
 - a. £150 in the ratio of 3:2
 - b. 280kg in the ratio of 2:5
 - c. 360m in the ratio of 1:2:6
 - d. £125 in the ratio of 3:7:2
 - e. 184mm in the ratio of 4:1:3
3. Write the ratios in their simplest form
 - a. 2:8:6
 - b. 12:48:18
 - c. 20:15:5
 - d. 108:36:72
 - e. 144:36:60
4. Write the ratios in the form of 1:n
 - a. 3:12
 - b. 9:5
 - c. 6:60:48
 - d. 8:44:32
 - e. 121:99
5. Andy uses 120g of flour to make 8 biscuits. Write the ratio of biscuits to flour in its simplest form.
6. Three friends Jack, Jim, and John win £180 which they share in the ratio of ratio of 2:3:7 respectively. How much does each person get?
7. Toby earned 15 points for every 8 vouchers collected. How many points does he earn for collecting 3 vouchers?
8. Brennon drinks 3 glasses of water every 5 hours. How many glasses of water does he drink when working for 12 hours?
9. Carl jogs 5km when David jogs 6km
 - a. Write the distances they jog in the form of 1:n
 - b. How many km does Carl jog, if David jogs 20km?
10. The ratio of men to women is 2:3 when there are 40 people in the room. What is the new ratio if 5 men enter the room?
11. A herd of 52 cows has 12 white cows and the rest brown. What is the simplest ratio of white to brown cows?
12. A pattern has 5 red triangles and 30 blue triangles. Write the red to blue triangle ratio in a simplest form.
13. A group of children at a nursery as 63 girls and 27 boys. Write the number of boys to children as a ratio in its simplest form.
14. 6kg of cement powder is mixed with 10kg of sand and 5l of water.
 - a. Write the ratio of cement to sand to water as a ratio in its simplest form.
 - b. How much cement and sand are mixed with 24l of water?
15. A baker uses 20g of yeast to make 9 bread rolls. How many bread rolls can be made with 65g of yeast?
16. A recipe for 12 brownies requires 2 eggs, 180g of flour, 3 teaspoons of baking powder and 50ml of water. What quantities of ingredients are needed for 30 brownies?
17. Sam plants 15 daffodils, 25 crocuses, and 48 snowdrops in every 3 squares metres. How many bulbs does he plant in 20 square metres?