

Ratio and Proportion Worksheet

Simplifying ratios, sharing in a ratio, and proportion problems. 30 questions.

Name: _____ Date: _____ Form: _____

Part A: Simplifying ratios and equivalent ratios

Write each ratio in its simplest form. (Q1-9, then answer Q10)

1. 12 : 18
2. 25 : 40
3. 45 : 60
4. 1.5 : 2
5. 84 : 36
6. $2\frac{1}{2}$: 5
7. 45 minutes : 2 hours
8. \$3.60 : \$6
9. 3 kg : 750 g
10. A punch recipe uses flour : sugar in the ratio 5 : 3. If 20 cups of flour are used, how many cups of sugar are needed?

Part B: Sharing quantities in a given ratio

Solve each of the following. (Q11-20)

11. Share \$120 between two people in the ratio 2 : 3.
12. Share 72 sweets between two children in the ratio 5 : 4.
13. Share \$450 among three people in the ratio 1 : 2 : 6.
14. A rope 88 m long is cut in the ratio 3 : 5. Find the length of each part.
15. A profit of \$1,800 is shared between two partners in the ratio 4 : 5. Find each share.
16. A prize of \$720 is shared in the ratio 2 : 3 : 4. Find the largest share.
17. Green paint is mixed from blue and yellow in the ratio 2 : 5. How many litres of each colour are in 42 litres of the paint?
18. The angles of a triangle are in the ratio 1 : 2 : 3. Find the size of each angle.
19. \$96 is shared so that one person receives twice as much as the other. How much does each receive?
20. Three friends share \$900 in the ratio 3 : 5 : 7. How much does the friend with the largest share receive?

Part C: Proportion problems

Solve each of the following. (Q21-30)

21. If 3 pens cost \$4.50, what is the cost of 7 pens?
22. A recipe uses 200 g of rice for 4 people. How much rice is needed for 7 people?
23. A car travels 180 km on 15 litres of fuel. How far can it travel on 8 litres?

24. If 6 workers can build a wall in 9 days, how long would 9 workers take (working at the same rate)?
25. One tap fills a tank in 8 minutes. How long would two identical taps take, working together?
26. A map has a scale of 1 : 50,000. What actual distance does 4 cm on the map represent? (1 km = 100,000 cm)
27. US\$1 = EC\$2.70. How many EC dollars would you receive for US\$50?
28. A bus travels at 60 km/h. How long does it take to travel 210 km?
29. 15 buses are needed to carry 600 students on a trip. How many buses are needed for 800 students?
30. y is proportional to x . When $x = 3$, $y = 12$. Find y when $x = 7$.