



Year 6 Worksheet 5: Ratio, Proportion and Scaling

Level: Beginner

1. If 2 apples cost '1, how much for 4?
2. What is the ratio of 3 red balls to 2 blue balls?
3. Share 12 sweets equally between 3 people.
4. Scale up: 1 bag has 5 apples. How many in 4 bags?
5. What is $\frac{1}{2}$ of 60?
6. Simplify the ratio 6:3
7. If 5 pencils cost '2.50, how much is 1?
8. Complete the proportion: $1:3 = 3: \underline{\hspace{1cm}}$
9. Find $\frac{1}{4}$ of 100
10. If a recipe uses 2 eggs for 1 cake, how many for 3 cakes?

[Use the space below to work out your answers. Show all your working.]



Year 6 Worksheet 5: Ratio, Proportion and Scaling

Level: Intermediate

1. What is the ratio of 8:12 in its simplest form?
2. A model is made at a scale of 1:5. If the model is 20cm, what is the actual length?
3. Solve: $\frac{2}{3}$ of a number is 30
4. Share '120 in the ratio 2:1
5. A recipe for 4 people uses 200g flour. How much for 10 people?
6. Complete: $4:6 = 10: \underline{\hspace{1cm}}$
7. Use proportion: 3 pens cost '1.80. How much for 9?
8. If the scale factor is 2, what happens to 3cm?
9. What is 60% of 300?
10. Write a ratio to compare 12 boys to 8 girls

[Use the space below to work out your answers. Show all your working.]



Year 6 Worksheet 5: Ratio, Proportion and Scaling

Level: Difficult

1. A map has a scale of 1:1000. What distance represents 5cm?
2. A school splits 180 students in a 3:2 ratio. How many in each group?
3. Solve: $\frac{5}{6}$ of a number is 150
4. Scale up: 1.5L makes 6 drinks. How much for 15?
5. If 4 apples cost '1.40, how much for 10 apples?
6. A shape is enlarged by scale factor 3. Its side is 4cm. New size?
7. Share '300 in ratio 5:7
8. Find missing: $12: __ = 4:5$
9. A toy is built at scale 1:20. The real height is 3m. Model height?
10. $2:3 = 10:x$. Find x.

[Use the space below to work out your answers. Show all your working.]



Year 6 Worksheet 5: Ratio, Proportion and Scaling

Level: Super Challenging

1. A wall mix requires sand and cement in a 5:2 ratio. How much cement for 14kg sand?
2. If '600 is shared in ratio 3:2:1, how much does each person get?
3. A scale drawing uses 1cm for every 2.5m. What does 12cm represent?
4. Solve: $\frac{2}{5}$ of a number is 180
5. If the scale factor is 4, what's the new area of a 3cm ' 2cm shape?
6. A car travels 120 miles in 2 hours. At that rate, how far in 7.5 hours?
7. Find x: $7:x = 14:28$
8. Simplify the ratio: 100:150:50
9. A group of 180 students is divided in ratio 4:5:1. How many in each group?
10. A rectangle's length increases by scale factor 2. Width stays same. How does area change?

[Use the space below to work out your answers. Show all your working.]