Maths Week · Grade 5 · Word problems

Rate and ratio

Name: _____

Remember: Rate compares two different things, like km per hour or rand per bottle. **Ratio** compares things of the same kind, like 3 : 5. **Why does it work?** First work out how much for 1, then you can work it out for any number.

1 A car travels 60 km in 1 hour. How far does it travel at the same speed in 3 hours?

2 A loaf of bread costs R18. How much do 4 loaves cost?

3 A tap lets out 12 ℓ of water in 1 minute. How many litres is that in 5 minutes?

4 Sipho reads 15 pages a day. How many days does it take him to read a book of 120 pages?

5 6 pens cost R42. How much does 1 pen cost?

6 How much does one bottle of juice cost in Pack A?

Pack A	3 bottles of juice	R27
Pack B	5 bottles of juice	R40

7 How much does one bottle of juice cost in Pack B?

8 Which pack gives the best value for money? Why?

9 Write the ratio of circles to squares on the bead string.



10 Now write the ratio of squares to circles.

11 In a soccer club there are 3 girls for every 2 boys. There are 10 boys. How many girls are there?

12 Gran uses 2 cups of flour for 12 pancakes. How many cups of flour does she need for 36 pancakes?

13 You mix 1 part syrup with 4 parts water. How much water do you need for 2 ℓ of syrup?

14 Anna and Ben share R60 in the ratio 1 : 2. How much does Ben get?

15 A cyclist rides 18 km in 1 hour. How long does it take to ride 90 km?

I got _____ out of 15 ☆ ☆ ☆

Maths Week · Grade 5 · Memo

Memo: Rate and ratio

1. **180 km**
   60 × 3 = 180

2. **R72**
   R18 × 4 = R72

3. **60 ℓ**
   12 × 5 = 60

4. **8 days**
   120 ÷ 15 = 8

5. **R7**
   R42 ÷ 6 = R7

6. **R9**
   R27 ÷ 3 = R9

7. **R8**
   R40 ÷ 5 = R8

8. **Pack B: one bottle costs only R8**
   R8 is less than R9 per bottle.

9. **3 : 5**
   3 circles and 5 squares

10. **5 : 3**
    The order of the words gives the order of the numbers.

11. **15 girls**
    10 ÷ 2 = 5; 5 × 3 = 15

12. **6 cups**
    36 ÷ 12 = 3; 3 × 2 = 6

13. **8 ℓ**
    2 × 4 = 8

14. **R40**
    1 + 2 = 3 parts; R60 ÷ 3 = R20; R20 × 2 = R40

15. **5 hours**
    90 ÷ 18 = 5