Percentages

Free Extra Maths Class · Grade 7

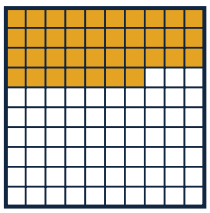
Name: _____

Remember: Percent means "out of 100". Percentage increase or decrease = change ÷ original amount × 100.
Why? We divide by the original amount because we compare the change with the start; × 100 gives "out of 100".

1. Calculate 25% of R96.

2. Write $\frac{3}{20}$ as a percentage.

3. What percentage of the 100 blocks is yellow? Also write it as a fraction and as a decimal.



4. Write 85% as a fraction in simplest form.

5. Use the 10% method: calculate 30% of R270.

6. A family drives 360 km. They have done 15% of it. How many km is that?

7. Kayla gets 21 out of 25 in a test. What is her percentage?

8. 18 of the 40 learners in a class walk to school. What percentage walk?

9. A bicycle pump costs R240. The price goes up by 15%. What is the new price?

10. Sneakers cost R520. There is 35% off. What do you pay?

11. Arrange from smallest to biggest: 0,6; $\frac{5}{8}$; 58%; 0,605

12. A club has 80 members. A year later it has 92 members. What is the percentage increase?

13. The price of a tent drops from R650 to R546. What is the percentage decrease?

14. Bongani saves R1 200. He spends 25% on a helmet and then 40% of the rest on books. How much is left?

15. A tablet costs R800. The price goes up by 25%. Later there is 20% off the new price. Is the final price more than, less than or equal to R800?

I got _____ **out of 15** ☆ ☆ ☆

Memorandum

Percentages

Other correct methods are also right.

1. R24

25% = $\frac{1}{4}$; R96 ÷ 4 = R24

2. 15%

$\frac{3}{20} = \frac{15}{100}$ = 15%

3. 37% = $\frac{37}{100}$ = 0,37

37 of the 100 blocks are yellow: 37 out of 100 = 37%

4. $\frac{17}{20}$

$\frac{85}{100} = \frac{17}{20}$ (÷ 5)

5. R81

10% = R27; 30% = 3 × R27 = R81

6. 54 km

10% = 36 km; 5% = 18 km; 36 + 18 = 54 km

7. 84%

$\frac{21}{25} = \frac{84}{100}$ = 84%

8. 45%

$\frac{18}{40}$ × 100 = 45%

9. R276

15% of R240 = R36; R240 + R36 = R276

10. R338

35% of R520 = R182; R520 – R182 = R338

11. 58%; 0,6; 0,605; $\frac{5}{8}$

As percentages: 0,6 = 60%; $\frac{5}{8}$ = 62,5%; 58% = 58%; 0,605 = 60,5%

12. 15%

increase = 12; $\frac{12}{80}$ × 100 = 15%

13. 16%

decrease = R104; $\frac{104}{650}$ × 100 = 16%

14. R540

helmet: R300; left: R900; books: 40% of R900 = R360; R900 – R360 = R540

15. Equal to R800

25% of R800 = R200; R800 + R200 = R1 000; 20% of R1 000 = R200; R1 000 – R200 = R800