

Grade 6 - Percent as a Rate per 100 - Answer Key

Common Core 6.RP.A.3c · maths-pdf.fr/en/

This **percent practice solutions** for 6th Grade covers percent as a rate per 100 (Common Core 6.RP.A.3c), with a free PDF to print.

Check each percent problem with this answer key. The solutions show the fraction or decimal form of each percent, the multiplication or division, and the final answer in bold. Several solutions include the tape diagram or number line.

Grade 6 · Common Core State Standards: **6.RP.A.3c**

Percent practice solutions: exercises 1 to 10

Exercise 1 - Percent from a grid

35 of 100 squares are shaded.

$$\frac{35}{100} = 0.35 = 35\%$$

$$\frac{35}{100}, 0.35, 35\%$$

Exercise 2 - Percent to fraction

Percent means per 100: $40\% = \frac{40}{100}$.

Divide top and bottom by 20: $\frac{40}{100} = \frac{2}{5}$.

$$\frac{2}{5}$$

Exercise 3 - Ten percent

$10\% = \frac{1}{10}$, so divide by 10.

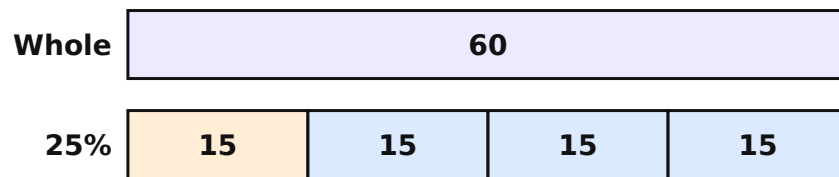
$$80 \div 10 = 8$$

8

Exercise 4 - Quarter of a quantity

$$25\% = \frac{1}{4}, \text{ and } 60 \div 4 = 15.$$

15



One quarter of 60 is 15.

Exercise 5 - Half of a number

$$50\% = \frac{1}{2}.$$

$$36 \div 2 = 18$$

18

Exercise 6 - Percent of 200

$$15\% = 0.15.$$

$$0.15 \times 200 = 30$$

30

Exercise 7 - Percent of 45

$$10\% \text{ of } 45 \text{ is } 4.5, \text{ so } 30\% \text{ is } 3 \times 4.5 = 13.5.$$

13.5

Exercise 8 - Free throws

$$\frac{18}{24} = \frac{3}{4} = \frac{75}{100}$$

75%

Exercise 9 - Find the whole: 20%

$20\% = \frac{1}{5}$, so 14 is one of 5 equal parts.

$$14 \times 5 = 70$$

70

Exercise 10 - Find the whole: 60%

$60\% = \frac{6}{10}$, so 6 tenths equal 45.

One tenth: $45 \div 6 = 7.5$. Ten tenths: $7.5 \times 10 = 75$.

75

Exercises 11 and up

Exercise 11 - Restaurant tip

10% of \$40.00 is \$4.00, and 5% is \$2.00.

$$\$4.00 + \$2.00 = \$6.00$$

\$6.00

Exercise 12 - Sale price

Discount: $0.20 \times 35 = 7$, so \$7.00.

Sale price: $\$35.00 - \$7.00 = \$28.00$.

discount \$7.00; sale price \$28.00

Exercise 13 - More than 100%

$$150\% = 1.5.$$

$$1.5 \times 40 = 60$$

60

Exercise 14 - Band students

$$0.40 \times 25 = 10$$

10 students

Exercise 15 - Sales tax

$$\text{Tax: } 0.08 \times 50 = 4.$$

$$\text{Total: } \$50.00 + \$4.00 = \$54.00.$$

tax \$4.00; total \$54.00

Exercise 16 - Quiz score

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

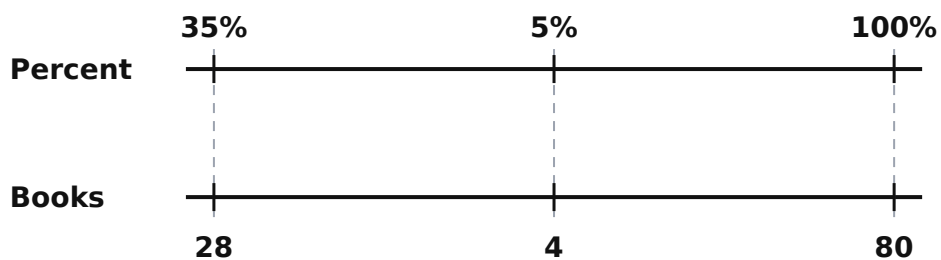
84%

Exercise 17 - Fiction books

$$35\% = \frac{35}{100} = \frac{7}{20}, \text{ so 7 parts are 28 books.}$$

$$\text{One part: } 28 \div 7 = 4. \text{ All 20 parts: } 4 \times 20 = 80.$$

80 books



Divide by 7, then multiply by 20.

Exercise 18 - Which is greater?

$$\text{Game 1: } \frac{18}{30} = \frac{60}{100} = 60\%.$$

$$\text{Game 2: } \frac{28}{50} = \frac{56}{100} = 56\%.$$

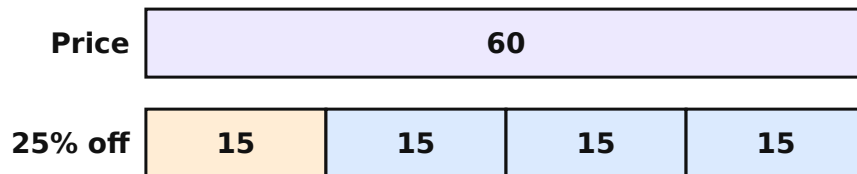
Game 1 was better (60% vs 56%).

Exercise 19 - Shoes with a coupon

Discount: $0.25 \times 60 = 15$. Sale price: $\$60.00 - \$15.00 = \$45.00$.

After the coupon: $\$45.00 - \$5.00 = \$40.00$.

\$40.00



The shaded quarter is the discount.

Exercise 20 - Bake sale money

Cupcakes: $0.35 \times 240 = 84$.

Other items: $\$240.00 - \$84.00 = \$156.00$. (This is 65%: $0.65 \times 240 = 156$.)

cupcakes \$84.00; other \$156.00

Key facts behind this percent practice solutions

Key facts

- Percent means per 100: $35\% = 35/100 = 0.35$.
- To find a percent of a number, multiply by the decimal or fraction form.
- 10%, 25%, and 50% are quick benchmarks: one tenth, one quarter, and one half.
- To find the whole, use a tape diagram or divide the part by the percent.
- Discounts are subtracted; tips and tax are added.

How to use this percent practice solutions

Cover each solution, solve the exercise again, then uncover it and compare every line. If your answer differs, find the first step that changed and redo the exercise from there.

Download the percent practice solutions as a PDF with the button below and keep it with your notes.