

Grade 6 · Percents · Worksheet Answer Key

Common Core 6.RP.A.3c · mathovore.fr

This answer key shows a full worked solution for each of the 10 percents problems, with every step and a check. Compare your method and the bold final answers, especially where the problem asks for a part, a whole, or a percent.

Grade 6 Common Core: 6.RP.A.3c

Problem 1: Percent to fraction and decimal

Fraction: $35\% = \frac{35}{100}$. The greatest common factor of 35 and 100 is 5, so $\frac{35 \div 5}{100 \div 5} = \frac{7}{20}$.

Decimal: $35 \div 100 = 0.35$.

$\frac{7}{20}$ and 0.35.

Problem 2: Fraction and decimal to percent

(a) $\frac{3}{4} = \frac{75}{100} = 75\%$.

(b) $0.08 \times 100 = 8$, so $0.08 = 8\%$.

(a) 75%. (b) 8%.

Problem 3: Percent of a number

Write 25% as 0.25: $0.25 \times 80 = 20$.

Check: 25% is one fourth, and $80 \div 4 = 20$.

20.

Problem 4: Percent of a quantity

$40\% = 0.40$. Multiply: $0.40 \times 65 = 26$.

26 miles.

Problem 5: Bake sale percent

$15\% = 0.15$. Multiply: $0.15 \times 60 = 9$.

9 oatmeal cookies.

Problem 6: Free throws

Divide the part by the whole: $18 \div 24 = 0.75$.

$0.75 = 75\%$.

75%.

Problem 7: Finding the whole

Divide the part by the percent as a decimal: $21 \div 0.30 = 70$.

Check: $0.30 \times 70 = 21$.

70.



Each part is $21 \div 3 = 7$, so the whole is 70.

Problem 8: Sale price

(a) $20\% = 0.20$. Discount: $0.20 \times 60 = 12$.

(b) Sale price: $60 - 12 = 48$.

(a) \$12. (b) \$48.

☐	Sale price
	\$48
	(\$60 - \$12)

Discount \$12, sale price \$48.

Problem 9: Cupcake sales

45 cupcakes is 75% of the whole. Divide: $45 \div 0.75 = 60$.

Check: $0.75 \times 60 = 45$.

60 cupcakes.

15	15	15	15
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3 parts of 15 make 45, so the whole of 4 parts is 60.

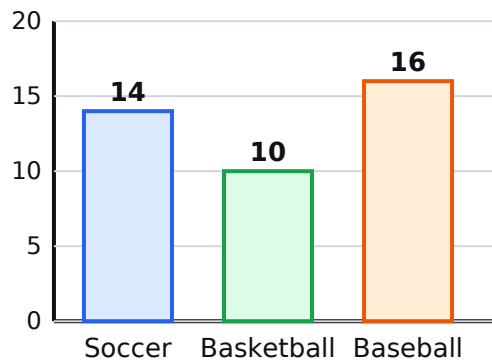
Problem 10: Class survey

Soccer: $0.35 \times 40 = 14$ students. Basketball: $0.25 \times 40 = 10$ students.

Baseball is the rest: $100\% - 35\% - 25\% = 40\%$, and $0.40 \times 40 = 16$.

Check: $14 + 10 + 16 = 40$.

14 chose soccer, 10 chose basketball, 16 chose baseball.



Number of students who chose each sport.