

Percent Power Moves

Use proportions to find parts, totals, and changes.

GRADE 7 • MA.7.AR.3

MA.7.AR.3 "Use percentages and proportional reasoning to solve problems."

NAME _____

DATE _____

PERCENT PATHS

To find $p\%$ of a number, write $p\%$ as $p/100$ and multiply. To find what percent one amount is of another, divide the part by the whole and multiply by 100%.

WORKED EXAMPLE

Find 12% of 150.

1. Write 12% as $12/100$.
2. Multiply: $12/100 * 150 = 18$.
3. The value of 12% of 150 is 18.

Answer: 18

PRACTICE 6 problems

1 Find 35% of 80.

ANSWER _____

2 27 is what percent of 90?

ANSWER _____

3 42 is 70% of what number?

ANSWER _____

4 A \$64 item is discounted 25%. What is the sale price?

ANSWER _____

5 Write $3/5$ as a percent.

ANSWER _____

6 A \$50 online purchase has a 14% service fee. What is the total cost?

ANSWER _____

APPLY IT Show your work

- 1** The drama club has raised \$72 for new lights. This amount is 60% of its fundraising goal. What is the club's total goal?

WORK SPACE

ANSWER _____

- 2** A video game costs \$50. It is on sale for 20% off, and then 10% sales tax is added to the sale price. What is the final cost?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A jacket costs \$80. It is discounted 25%, then the sale price is increased by 25%. What is the final price? Is it the same as the original price? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find 35% of 80.	28
2	27 is what percent of 90?	30%
3	42 is 70% of what number?	60
4	A \$64 item is discounted 25%. What is the sale price?	\$48
5	Write $\frac{3}{5}$ as a percent.	60%
6	A \$50 online purchase has a 14% service fee. What is the total cost?	\$57

PART 2 • APPLY IT

1. **\$120** Since \$72 is 60% of the goal, multiply 72 by $\frac{100}{60}$. The total goal is \$120.
2. **\$44** The discount is \$10, so the sale price is \$40. Ten percent of \$40 is \$4, making the final cost \$44.

CHALLENGE

The final price is \$75. It is not the same as the original price because it is \$5 less.

Accept equivalent fraction, decimal, or percent forms when they match the requested quantity. Require dollar signs for money answers and clear reasoning for the challenge.