

Percent Power Moves

Practice finding percent changes, prices, and rates.

GRADE 7 • TEKS 7.4.D

7.4.D "solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems; and"

NAME _____

DATE _____

TRACK THE ORIGINAL AMOUNT

To find a percent increase, find the percent of the original amount and add it. To find a percent decrease, find the percent of the original amount and subtract it. Always use the original amount as the base when finding the percent change.

WORKED EXAMPLE

A jacket's price rises from \$32 to \$40. What is the percent increase?

1. Find the change: $40 - 32 = 8$.
2. Divide by the original price: $8 / 32 = 0.25$.
3. Write the decimal as a percent: $0.25 = 25\%$.

Answer: 25% increase

PRACTICE 6 problems

- 1** A \$50 backpack price is increased by 10%. What is the new price?

ANSWER _____

- 2** Decrease \$60 by 15%.

ANSWER _____

- 3** A number rises from 45 to 54. What is the percent increase?

ANSWER _____

- 4** A game controller costs \$80 and is discounted 30%. What is the sale price?

ANSWER _____

- 5** You buy snacks that cost \$12 before tax. Sales tax is 5%. What is the total cost?

ANSWER _____

- 6** A 6-pack of drinks costs \$18. What is the unit price per drink?

ANSWER _____

APPLY IT Show your work

- 1** A pair of headphones is marked \$75. A store gives a 20% discount, then adds 6% sales tax to the discounted price. What is the final cost?

WORK SPACE

ANSWER _____

- 2** Maya earns \$96 from pet sitting. She puts 15% of the money into savings, then spends \$34 from what remains on a game. How much money does Maya have left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

An annual gaming membership costs \$200. Its price rises 15% one month and then falls 15% the next month. What is the final price? Explain why the final price is not the original price.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A \$50 backpack price is increased by 10%. What is the new price?	\$55
2	Decrease \$60 by 15%.	\$51
3	A number rises from 45 to 54. What is the percent increase?	20%
4	A game controller costs \$80 and is discounted 30%. What is the sale price?	\$56
5	You buy snacks that cost \$12 before tax. Sales tax is 5%. What is the total cost?	\$12.60
6	A 6-pack of drinks costs \$18. What is the unit price per drink?	\$3 per drink

PART 2 • APPLY IT

1. **\$63.60** The discount is \$15, so the discounted price is \$60. Sales tax is \$3.60, making the final cost \$63.60.
2. **\$47.60** Maya saves \$14.40, leaving \$81.60. After spending \$34, she has \$47.60 left.

CHALLENGE

The final price is \$195.50. The price increases to \$230, then 15% of \$230 is \$34.50, so subtracting gives \$195.50.

Accept equivalent money notation, such as 55 dollars for \$55, when the value is correct. For percent-change problems, students may use decimals or fractions if their final answer is correct.