

Percent Power Moves

Use percents to make smart choices with money and everyday plans.

GRADE 8 • TEKS 8.1.A

8.1.A "apply mathematics to problems arising in everyday life, society, and the workplace;"

NAME _____

DATE _____

FIND THE PERCENT, THEN ADJUST

To find a percent of a quantity, multiply the quantity by the percent written as a decimal or fraction. Subtract the percent amount for a discount or amount used, and add it for a tax or increase.

WORKED EXAMPLE

A \$48 backpack is on sale for 25% off. What is the sale price?

1. Find 25% of \$48: $0.25 \times 48 = 12$.

2. Subtract the discount: $48 - 12 = 36$.

Answer: The sale price is \$36.

PRACTICE 6 problems

- 1** A \$34 water bottle is discounted by 15%. What is the sale price?

ANSWER _____

- 2** A game costs \$72 before 8% sales tax. What is the total cost?

ANSWER _____

- 3** A babysitting job pays \$45, then the pay increases by 20%. What is the new pay?

ANSWER _____

- 4** A phone has 64 GB of storage. If 75% of the storage is used, how many GB are unused?

ANSWER _____

- 5** A concert ticket costs \$80 and is reduced by 30%. What is the sale price?

ANSWER _____

- 6** A music plan costs \$28 per month and increases by 15%. What is the new monthly cost?

ANSWER _____

APPLY IT Show your work

- 1** A gaming controller costs \$40. It is discounted by 10%, then 6% sales tax is added to the discounted price. What is the final cost?

WORK SPACE

ANSWER _____

- 2** You have a \$90 budget for a club game night. You use 30% of the budget for supplies and spend \$17 on snacks. How much money is left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A \$70 pair of shoes is discounted by 10%, then discounted by another 20% of the new price. Is this the same as taking 30% off the original price? Find the final price and explain your reasoning.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A \$34 water bottle is discounted by 15%. What is the sale price?	\$28.90
2	A game costs \$72 before 8% sales tax. What is the total cost?	\$77.76
3	A babysitting job pays \$45, then the pay increases by 20%. What is the new pay?	\$54
4	A phone has 64 GB of storage. If 75% of the storage is used, how many GB are unused?	16 GB
5	A concert ticket costs \$80 and is reduced by 30%. What is the sale price?	\$56
6	A music plan costs \$28 per month and increases by 15%. What is the new monthly cost?	\$32.20

PART 2 • APPLY IT

1. **\$38.16** The discount is \$4, so the discounted price is \$36. Six percent of \$36 is \$2.16, and $\$36 + \$2.16 = \$38.16$.
2. **\$46** Thirty percent of \$90 is \$27. Subtract both expenses: $\$90 - \$27 - \$17 = \46 .

CHALLENGE

No. The final price is \$50.40, and the total discount is 28% of the original price.

Accept equivalent calculations that correctly find the percent amount before adjusting the total. For the challenge, accept explanations showing that the second discount is taken from the reduced price, not from the original price.