

# Percent Power Moves

*Find parts and wholes with percent rates.*

**GRADE 6 • 6.RP.A.3c**

**CCSS.Math.Content.6.RP.A.3c** "Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent."

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## PERCENT AS A RATE

To find  $p\%$  of a quantity, write  $p\%$  as  $p/100$  and multiply. To find the whole when you know a part and a percent, divide the part by  $p/100$ .

## WORKED EXAMPLE

Find 18% of 250.

1. Write 18% as  $18/100$ .
2. Multiply:  $18/100 \times 250 = 4500/100$ .
3. Simplify:  $4500/100 = 45$ .

**Answer: 45**

## PRACTICE 6 problems

**1** Find 35% of 80.

**ANSWER** \_\_\_\_\_

**2** Find 12% of 200.

**ANSWER** \_\_\_\_\_

**3** Find 75% of 64.

**ANSWER** \_\_\_\_\_

**4** 30 is 15% of what number?

**ANSWER** \_\_\_\_\_

**5** 42 is 70% of what number?

**ANSWER** \_\_\_\_\_

**6** Find 8% of 325.

**ANSWER** \_\_\_\_\_

## APPLY IT Show your work

- 1** A game has 96 levels. Maya has completed 25% of them. How many levels has she completed?

WORK SPACE

ANSWER \_\_\_\_\_

- 2** At a school concert, 56 seats are filled. This is 70% of all the seats. How many seats are in the auditorium?

WORK SPACE

ANSWER \_\_\_\_\_

## CHALLENGE One step up

### CHALLENGE

A gaming tournament has 240 players. In round one, 30% qualify. Of the players who do not qualify in round one, 25% qualify through a second-chance round. How many players qualify in all?

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**PART 1 • PRACTICE**

| # | PROBLEM                   | ANSWER     |
|---|---------------------------|------------|
| 1 | Find 35% of 80.           | <b>28</b>  |
| 2 | Find 12% of 200.          | <b>24</b>  |
| 3 | Find 75% of 64.           | <b>48</b>  |
| 4 | 30 is 15% of what number? | <b>200</b> |
| 5 | 42 is 70% of what number? | <b>60</b>  |
| 6 | Find 8% of 325.           | <b>26</b>  |

**PART 2 • APPLY IT**

1. **24 levels** Compute  $25/100 \times 96 = 24$ .
2. **80 seats** Divide 56 by  $70/100$  to find the whole:  $56 / 0.70 = 80$ .

**CHALLENGE****114 players**

Accept equivalent fraction, decimal, or equation methods. Require units for the word problems and challenge.