

Percent Power Moves

Find exact and estimated parts of whole numbers.

GRADE 7 • 7.CE.2.d

7.CE.2.d "Estimate and determine the percentage of a given whole number, including but not limited to the use of benchmark percentages."

NAME _____

DATE _____

FIND THE PART

To find a percentage of a whole number, change the percent to a decimal or break it into easy parts, then multiply by the whole. To estimate, replace the percent with a nearby benchmark percentage and state that your result is approximate.

WORKED EXAMPLE

Find 15% of 240.

1. Find 10% of 240: $240 \div 10 = 24$.
2. Find 5% of 240: $24 \div 2 = 12$.
3. Add the parts: $24 + 12 = 36$.

Answer: 36

PRACTICE 6 problems

1 Find 25% of 84.

ANSWER _____

2 Find 30% of 170.

ANSWER _____

3 Find 40% of 65.

ANSWER _____

4 Find 14% of 150.

ANSWER _____

5 Estimate 49% of 78 by using 50% as a benchmark.

ANSWER _____

6 Find 75% of 64.

ANSWER _____

APPLY IT Show your work

- 1** A streaming club has 90 members. If 30% of the members vote for a movie night, how many members vote for it?

WORK SPACE

ANSWER _____

- 2** At a game tournament, 80 players choose a strategy game. If 35% of the players choose a team challenge, how many players choose the team challenge?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Without a calculator, find 35% of 180. Explain your method using benchmark percentages.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find 25% of 84.	21
2	Find 30% of 170.	51
3	Find 40% of 65.	26
4	Find 14% of 150.	21
5	Estimate 49% of 78 by using 50% as a benchmark.	about 39
6	Find 75% of 64.	48

PART 2 • APPLY IT

1. **27 members** Find 30% of 90. Since $3 \times 9 = 27$, 30% of 90 is 27.
2. **28 players** Find 35% of 80 by adding 30% and 5%. Thirty percent is 24 and 5% is 4, so the total is 28.

CHALLENGE

63; 30% of 180 is 54 and 5% of 180 is 9, so 35% of 180 is 63.

Accept equivalent correct methods, including decimals, fractions, or benchmark parts. For problem 5, accept about 39 because 49% rounds to the 50% benchmark.