

GRADE 6

PERCENTAGES

Complete Worksheet Pack

What this pack covers

Percentage conversions • Finding percentages of quantities • Finding the whole •
Missing percentages • Percentage increase & decrease • Real-life applications •
Multi-step reasoning

6 practice worksheets + 6 separate answer-key pages

Worksheet 1: Percentage Basics & Conversions

Show your working. Give answers in the form requested and check whether your result is reasonable.

1. Convert **$\frac{1}{2}$** to a percentage.
2. Convert **$\frac{3}{4}$** to a percentage.
3. Convert **0.35** to a percentage.
4. Convert **62%** to a decimal.
5. Convert **45%** to a fraction in simplest form.
6. Complete: **25%** = $\frac{\quad}{100}$ = $\frac{\quad}{4}$.
7. Which is greater: 0.68 or 65%?
8. Write **12.5%** as a fraction in simplest form.

Answer Key 1

Worksheet 1: Percentage Basics & Conversions — Answers

1. 50%
2. 75%
3. 35%
4. 0.62
5. $\frac{9}{20}$
6. $\frac{25}{100} = \frac{1}{4}$
7. 0.68 (68%)
8. $\frac{1}{8}$

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 2: Finding Percentages of Quantities

Show your working. Give answers in the form requested and check whether your result is reasonable.

1. Find 10% of 250.
2. Find 25% of 360.
3. Find 15% of 200.
4. Find 35% of 80.
5. Find 12.5% of 240.
6. Find 40% of 275.
7. A class has 32 students. 75% attended a workshop. How many students attended?
8. A \$480 item is discounted by 20%. How much is the discount?

Answer Key 2

Worksheet 2: Finding Percentages of Quantities — Answers

1. 25
2. 90
3. 30
4. 28
5. 30
6. 110
7. 24 students
8. \$96

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 3: Finding the Whole & Missing Percentages

Show your working. Give answers in the form requested and check whether your result is reasonable.

1. 30% of a number is 45. Find the number.
2. 25% of a number is 72. Find the number.
3. 60% of a number is 150. Find the number.
4. 18 is what percentage of 72?
5. 42 is what percentage of 120?
6. 27 is 15% of what number?
7. A student scored 84 marks out of 120. What percentage did the student score?
8. A tank holds 500 L. It currently contains 325 L. What percentage full is it?

Answer Key 3

Worksheet 3: Finding the Whole & Missing Percentages — Answers

1. 150
2. 288
3. 250
4. 25%
5. 35%
6. 180
7. 70%
8. 65%

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 4: Percentage Increase & Decrease

Show your working. Give answers in the form requested and check whether your result is reasonable.

1. Increase 200 by 15%.
2. Decrease 500 by 12%.
3. A quantity of 80 increases by 25%. What is the new quantity?
4. A price of \$240 decreases by 15%. What is the new price?
5. A population rises from 800 to 920. Find the percentage increase.
6. A score falls from 90 to 72. Find the percentage decrease.
7. A shirt costs \$60 and its price increases by 10%. What is the new price?
8. A machine valued at \$1,200 loses 20% of its value. What is its new value?

Answer Key 4

Worksheet 4: Percentage Increase & Decrease — Answers

1. 230
2. 440
3. 100
4. \$204
5. 15%
6. 20%
7. \$66
8. \$960

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 5: Percentages in Real Life

Show your working. Give answers in the form requested and check whether your result is reasonable.

1. A school has 640 students. 35% take part in sports. How many students is that?
2. A shop offers 25% off a \$240 jacket. Find the sale price.
3. A family spends 30% of a \$2,000 monthly budget on housing. How much is that?
4. A test has 80 questions. A student answers 90% correctly. How many are correct?
5. A water bottle contains 750 mL. You drink 40%. How much remains?
6. A restaurant bill is \$80. A 10% service charge is added. What is the total?
7. A phone originally costs \$600. It is reduced by 15%, then a \$20 fee is added. What is the final price?
8. A class has 40 students. 60% are girls. Of the girls, 25% are in the art club. How many girls are in the art club?

Answer Key 5

Worksheet 5: Percentages in Real Life — Answers

1. 224 students
2. \$180
3. \$600
4. 72
5. 450 mL
6. \$88
7. \$530
8. 6 girls

Teacher note: Accept equivalent forms where mathematically correct.

Worksheet 6: Percentage Reasoning Challenge

Show your working. Give answers in the form requested and check whether your result is reasonable.

1. A number is increased by 20% to become 180. What was the original number?
2. A price is reduced from \$250 to \$200. What is the percentage decrease?
3. 40% of a number is 56. What is 75% of the same number?
4. A student says $20\% + 30\%$ of 100 = 50% of 100. Is the statement correct? Explain.
5. A \$400 item is increased by 10% and then reduced by 10%. Is the final price \$400? Calculate it.
6. A class is 80% full with 24 students. What is the full capacity?
7. Give two different percentages that add to 100% and whose values of 240 have a difference of 72.
8. A shop gives 20% off an item and then another 10% off the reduced price. What single percentage discount is this equivalent to?

Answer Key 6

Worksheet 6: Percentage Reasoning Challenge — Answers

1. 150
2. 20%
3. 105
4. Yes; $20\% \text{ of } 100 + 30\% \text{ of } 100 = 50\% \text{ of } 100 = 50$
5. No; $\$400 \times 1.10 = \440 , then $\times 0.90 = \$396$
6. 30 students
7. Example: 65% and 35%; values 156 and 84, difference 72
8. 28% ($0.8 \times 0.9 = 0.72$, so 28% discount)

Teacher note: Accept equivalent forms where mathematically correct.