

Percentages & Percent Change

Foundation to Challenge

Practice should make the test feel easier, not merely familiar.

Work without the answer key first. When you finish, use the QR code on the final page to check your answers online.

FOUNDATION

- 1** What is 35% of 260?

- 2** Eighty-four is what percent of 560?

- 3** A town's population increases from 16,000 to 19,600. What is the percent increase?

- A. 18%
- B. 20%
- C. 22.5%
- D. 24%

- 4** A store marks a \$72 item up by 30% and then discounts the marked price by 20%. What is the final price?

- A. \$69.12
- B. \$72.00
- C. \$74.88
- D. \$79.20

- 5 A restaurant bill is \$58.50 before tip. A customer leaves an 18% tip. How many dollars is the tip?

STANDARD

- 6 A wildlife count of 52,000 animals decreases by 7.5%. What is the new count?
- A. 47,100
 - B. 48,100
 - C. 48,900
 - D. 49,400

- 7 A quantity is increased by 15% and then the new amount is decreased by 15%. Compared with the original quantity, the final amount is
- A. 2.25% less
 - B. the same
 - C. 2.25% greater
 - D. 15% less

- 8 After an 18% discount, a desk costs \$123. What was its original price, in dollars?

- 9 A shop pays \$48 for a lamp and sets the selling price 37.5% above cost. What is the selling price?
- A. \$60
 - B. \$64
 - C. \$66
 - D. \$72

- 10** An app has 8,200 active users. The number rises by 5% in one month and then by 12% the next month. Approximately how many active users are there after the two increases? Round to the nearest whole user.

- 11** A survey response rate rises from 28% to 35%. Which statement is correct?
- A. It rose by 7% and by 7 percentage points.
 - B. It rose by 25% and by 7 percentage points.
 - C. It rose by 7% and by 25 percentage points.
 - D. It rose by 25 percentage points and by 35%.

- 12** In a customer survey, 45% prefer online ordering. Of those customers, 40% usually order from a mobile phone. What percent of all surveyed customers both prefer online ordering and usually order from a mobile phone?

ADVANCED

- 13** A \$320 appliance is discounted by 25%, and the discounted price is then reduced by an additional 12%. What is the final price?
- A. \$201.60
 - B. \$211.20
 - C. \$220.80
 - D. \$230.40

- 14** A salary is increased by 12% and later reduced by 8%. By what percent is the final salary greater than the original salary?

- 15** The width of a rectangle is increased by 40%. By approximately what percent must its length be decreased so that the area stays unchanged?

A. 20%
B. 25%
C. 28.57%
D. 40%

- 16** The area of a square increases by 69%. By what percent does its side length increase?

A. 19%
B. 25%
C. 30%
D. 34.5%

CHALLENGE

- 17** Quantity A is 24% of quantity B. Quantity B is what percent of quantity A? Give your answer to the nearest hundredth of a percent.

- 18** How many liters of a 34% salt solution must be mixed with 6 liters of a 10% salt solution to obtain a 22% salt solution?

Check your answers online.

The public practice PDF contains questions only. The answer check lives on the website so you can review your score, identify the kind of mistake you made, and move to the next resource.



ANSWER CHECK

Percentages

Scan the QR code or visit:

<https://aryalanupme.github.io/sat-percentages.html>

If you are stuck on one question, note the question number and the approach you tried before checking another solution.

Independent resource

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