

# Enhanced ACT Math Mini Practice Test with Answers

Original Effortless Math practice. This is not an official exam form. Work carefully, then use the answer key and explanations to review.

How to use this mini test: complete the questions without notes, show enough work that you can explain your thinking, and score the page only after the full set is finished. A short practice test is most useful when it tells you what to study next.

Review targets: mark each missed question as arithmetic, algebra, geometry, data, graph reading, or word-problem setup. Then solve one similar problem before moving to a full-length practice test.

1. If  $2x + 5 = 17$ ,  $x$  equals:

- A. 4
- B. 5
- C. 6
- D. 7

2. A line has slope 3 and y-intercept -2. Which equation matches?

- A.  $y = 3x - 2$
- B.  $y = -2x + 3$
- C.  $y = x + 3$
- D.  $y = 2x - 3$

3. What is 40% of 75?

- A. 25
- B. 30
- C. 35
- D. 40

4. A right triangle has legs 5 and 12. What is the hypotenuse?

- A. 13
- B. 15
- C. 17
- D. 20

5. If  $f(x) = x^2 + 1$ , find  $f(4)$ .

- A. 9
- B. 16
- C. 17
- D. 18

6. The median of 3, 8, 10, 14, 20 is:

- A. 8

- B. 10
- C. 12
- D. 14

7. A circle has radius 4. Its area is closest to:

- A. 25.1
- B. 37.7
- C. 50.2
- D. 100.5

8. Which is a solution to  $x + y = 10$ ?

- A. (2, 7)
- B. (3, 7)
- C. (5, 6)
- D. (8, 4)

# Answer Key and Explanations

1. C - Subtract 5, then divide by 2.
2. A - Slope-intercept form is  $y = mx + b$ .
3. B -  $0.40 \times 75 = 30$ .
4. A - 5-12-13 is a Pythagorean triple.
5. C -  $4^2 + 1 = 17$ .
6. B - The middle value is 10.
7. C - Area =  $\pi r^2 = 16\pi$ , about 50.2.
8. B -  $3 + 7 = 10$ .

## Study Log

1. My strongest topic in this set was: \_\_\_\_\_
2. My weakest topic in this set was: \_\_\_\_\_
3. The mistake I need to stop repeating is: \_\_\_\_\_
4. The next topic I will practice is: \_\_\_\_\_
5. One problem I should solve again tomorrow is number: \_\_\_\_\_

A good review is not just checking letters. It is naming the skill, correcting the method, and proving that the next similar question can be solved without help.