

MDTP ALGEBRA READINESS TEST

Practice Test & Guide

What is the Algebra Readiness Test?

- The Algebra Readiness Test is an assessment instrument approved for use in the placement of community college students into basic mathematics, pre-algebra, and elementary algebra courses.
- The Algebra Readiness Test was developed by the University of California and California State University through the California Mathematics Diagnostic Testing Project (MDTP).
- The Algebra Readiness Test was designed to measure arithmetic and pre-algebra skills to determine readiness for a first course in algebra (MATH-45).

How do I know if I should take the Algebra Readiness Test?

You should take the Algebra Readiness Test if any of the following apply:

- You had no high school algebra.
- You had one year of high school algebra or the equivalent.
- It has been several years since your last math class.

You should consider taking the Elementary Algebra Test if:

- you had 2 or more years of high school algebra or the equivalent **and**
- you received a grade of "C" or better in your last math course **and**
- you completed your last math course within the last two years.

How long is the Algebra Readiness Test?

The Algebra Readiness Test consists of 50 multiple-choice problems that must be completed within 45 minutes.

Skills Assessed

Skills measured on the Algebra Readiness Test are:

- Integers
- Fractions
- Decimals and Percent
- Exponents and Square Roots
- Simple Equations and Operations with Literal Symbols
- Geometry and Graphing

Integers – sample questions:

1. $8 - (6 - 9) =$
A. 11 B. 7 C. 5 D. -5
2. Mike received a check for \$215. He deposits all the money into his bank account and his new balance is \$2,184. What was his balance before he made the deposit?
A. \$969 B. \$1,869 C. \$1,969 D. \$2,399
3. What number multiplied by 8 gives -24?
A. 16 B. -32 C. 3 D. -3
4. Find the prime factorization of 30.
A. 2×15 B. 3×10 C. $2 \times 3 \times 5$ D. $2 \times 5 \times 5$

Fractions – sample questions:

5. $\frac{3}{4} + \frac{2}{3} =$
A. $\frac{7}{6}$ B. $\frac{5}{12}$ C. $\frac{17}{12}$ D. $\frac{5}{2}$
6. $\frac{7}{15} \times \frac{5}{14} =$
A. $\frac{1}{6}$ B. $\frac{1}{5}$ C. $\frac{1}{15}$ D. $\frac{7}{25}$

7. What fraction of the figure is shaded?



- A. $\frac{6}{7}$ B. $\frac{4}{7}$ C. $\frac{7}{12}$ D. $\frac{5}{12}$

Decimals – sample questions:

8. $6.8 + .37 =$

- A. 10.5 B. 7.57 C. 7.17 D. 8.17

9. What percent of 180 is 36?

- A. 20% B. 50% C. 200% D. 500%

10. Write as a decimal: 7%

- A. 70.0 B. 7.0 C. 0.7 D. 0.07

11. Arrange the following numbers in order from smallest to largest

$\frac{1}{4}$, $\frac{1}{5}$, 0.24, 0.26

- A. $\frac{1}{4}$, 0.24, 0.26, $\frac{1}{5}$ B. $\frac{1}{4}$, $\frac{1}{5}$, 0.24, 0.26 C. $\frac{1}{5}$, $\frac{1}{4}$, 0.24, 0.26 D. $\frac{1}{5}$, 0.24, $\frac{1}{4}$, 0.26

Exponents & Square Roots – sample questions:

12. $4^3 \cdot 4^6 =$

- A. 4^9 B. 4^{18} C. 16^9 D. 16^{18}

13. $(3.1)^2 + (.3)^2 =$

- A. 11.56 B. 10 C. 9.7 D. 9.619

14. $\sqrt{3^4} =$

- A. 7 B. 9 C. 18 D. 81

Simple Equations & Operations with Literal Symbols – sample questions:

15. Solve: $4x + 7 = 23$

- A. 4 B. 7 C. 16 D. 30

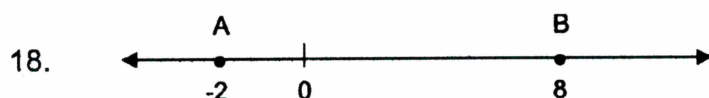
16. If $n = r + 5$ and $r = 3$, then $n =$

- A. 2 B. 4 C. 8 D. -2

17. Write an equation which says that distance d equals the product of rate of travel r and time traveled t .

- A. $d \times t = r$ B. $t = r \times d$ C. $d = t \times r$ D. $r = t \times d$

Geometry and Graphing – sample questions:



On the number line above, what is the distance between points **A** and **B**, and what number represents the point half the distance between points **A** and **B**?

- A. distance is 6; midpoint is 3 B. distance is 6, midpoint is 1 C. distance is 10, midpoint is 0 D. distance is 10, midpoint is 3
19. What is the radius of a circle whose area is 64π ?
- A. 8 B. 8π C. 32 D. 64
20. What is the length of the third side of a right triangle with a hypotenuse of 5 and one leg equal to 3?
- A. 8 B. 15 C. 4 D. 16

Answers:

Integers	(1) A (2) C (3) D (4) C
Fractions	(5) C (6) A (7) D
Decimals	(8) C (9) A (10) D (11) D
Exponents, Square Roots	(12) A (13) C (14) B
Equations with Literal Symbols	(15) A (16) C (17) C
Geometry & Graphing	(18) D (19) A (20) C

A MORE COMPREHENSIVE TEST PRACTICE IS AVAILABLE FOR PURCHASE IN THE SWC BOOKSTORE