



Unit 1 — Mid-Unit Summative (Lessons 1–8)

Course: Algebra 1 — Merit Education Group **Standards:** 9.3.5.5, 9.3.5.7 | **Format:** Full class period

Directions: Show all work on your own paper. Circle your final answer. No calculator except where noted. Show your work for full credit.

1 QUESTION 1

Write an algebraic expression: 'A number increased by 7.' • **A.** $7x$ • **B.** $x + 7$ • **C.** $x - 7$ • **D.** $x / 7$

2 QUESTION 2

Translate: "The product of a number and 4." • **A.** $4 + x$ • **B.** $4 - x$ • **C.** $4x$ • **D.** $x / 4$

3 QUESTION 3

Evaluate: $6 + 4 \times 5$ • **A.** 50 • **B.** 30 • **C.** 26 • **D.** 20

4 QUESTION 4

Evaluate: $(15 - 3) \div 4 + 2$ • **A.** 5 • **B.** 3 • **C.** 1 • **D.** 8

5 QUESTION 5

Evaluate $5x$ when $x = 6$. • **A.** 11 • **B.** 56 • **C.** 30 • **D.** -1

6 QUESTION 6

Evaluate $a + 2b$ when $a = 3$ and $b = 7$. • **A.** 12 • **B.** 17 • **C.** 10 • **D.** 21

7 QUESTION 7

The area of a triangle is $A = (1/2)bh$. Find A when $b = 10$ and $h = 8$. • **A.** 80 sq units • **B.** 18 sq units • **C.** 40 sq units • **D.** 20 sq units

8 QUESTION 8

How many terms are in $3x^2 + 7x - 5$? • **A.** 2 • **B.** 3 • **C.** 4 • **D.** 1

9 QUESTION 9

Translate: "A number divided by 3, plus 8." • **A.** $3x + 8$ • **B.** $x / 3 + 8$ • **C.** $x / (3 + 8)$ • **D.** $8x + 3$

10 QUESTION 10

Evaluate: $10 + 8 \div 2 - 3$ • **A.** 6 • **B.** 11 • **C.** 5 • **D.** 15

11 QUESTION 11

Evaluate $2x + 3y$ when $x = 4$ and $y = 1$. • **A.** 11 • **B.** 9 • **C.** 12 • **D.** 15

12 QUESTION 12

Identify the coefficient in $8x$. • **A.** 8 • **B.** x • **C.** 1 • **D.** 0

13 QUESTION 13

Maya buys 3 shirts at d dollars each and 2 pairs of pants at p dollars each. Write an expression for the total cost before tax, then find the total when $d = 8$ and $p = 12$.

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