

Name: _____ Date: _____ Score: ____ / 10

INSTRUCTIONS

For multiple-choice questions, circle the letter of the correct answer. For short-answer and problem-solving questions, show your complete work in the space provided. No calculator unless your teacher says otherwise.

1**Evaluate using the order of operations: $6 + 2(8 - 3)^2 \div 5$**

Multiple Choice

A 16**B** 8**C** 76**D** 20**2****Which best classifies the number -7 ?**

Multiple Choice

A Whole number only**B** Natural number only**C** Integer and rational number**D** Irrational number**3****Which property is illustrated by $3(x + 5) = 3x + 15$?**

Multiple Choice

A Associative Property**B** Distributive Property**C** Commutative Property**D** Identity Property**4****Short Answer — Evaluate $3x^2 - 2x + 5$ for $x = -2$.**

Short Answer

5**Simplify: $x^5 \cdot x^3$**

Multiple Choice

A x^8 **B** x^{15} **C** x^2 **D** $2x^8$ **6****Simplify: 2^{-3}**

Multiple Choice

A -8 **B** $1/8$ **C** 8**D** $-1/8$ **7****Short Answer — Write 0.000452 in scientific notation.**

Short Answer

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Multiply and write in scientific notation: $(3 \times 10^4)(2 \times 10^3)$

Multiple Choice

A

6×10^7

B

6×10^{12}

C

5×10^7

D

6×10^1

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Problem Solving — Simplify using the distributive property and combining like terms: $4(2x - 3) - 5x + 7$. Show all steps.

Problem Solving

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Problem Solving — A rectangular garden has length $(2x + 3)$ meters and width $(x - 1)$ meters. Write and simplify an expression for its perimeter.

Problem Solving