MSTAR PRACTICE WORKSHEET

Lesson 6-5: Write and Evaluate Algebraic Expressions

Grade 6 Mathematics · Standard 6.AT.6a

Name: _____ Date: _____

These are MSTAR-style questions written for this curriculum to rehearse the format. They are not official Maryland assessment items. MSTAR — Maryland's new state test, first given in spring 2027 — uses the same kinds of questions you see here: selected response, select-all, two-part evidence questions, and written responses.

Part A — Skills Check

Warm up with the lesson's core skills — one best answer each.

Question 1 SELECTED RESPONSE · 1 POINT

Which expression represents 'the product of 6 and a number n'?

(A) 6n

(B) 6 + n

(C) n – 6

(D) n ÷ 6

Question 2 SELECTED RESPONSE · 1 POINT

Which expression represents '9 less than a number y'?

(A) y – 9

(B) 9 – y

(C) y + 9

(D) 9y

Question 3 SELECTED RESPONSE · 1 POINT

Which expression represents 'the sum of a number m and 15'?

(A) m + 15

(B) m – 15

(C) 15m

(D) m ÷ 15

Question 4 SELECTED RESPONSE · 1 POINT

Evaluate 4.25s + 23.50 when s = 10.

(A) $47.75

(B) $66.00

(C) $66.75

(D) $277.50

Question 5 SELECTED RESPONSE · 1 POINT

Which key word tells you to multiply?

(A) Product

(B) Sum

(C) Difference

(D) Quotient

Question 6 SELECTED RESPONSE · 1 POINT

The expression 8n + 15 gives the cost of n tickets plus a fee. What is the cost for 6 tickets?

(A) $29

(B) $48

(C) $63

(D) $138

Part B — Test-Format Questions

These match the state test's formats: two-part questions, select-all, and written responses.

Question 7 TWO-PART QUESTION

Part A

A concert ticket costs 8 dollars. The website also charges one 5 dollar service fee for the whole order. Let t represent the number of tickets bought in one order. Which expression gives the total cost in dollars?

Fill in the bubble next to the one best answer.

(A) 8t + 5

(B) 8 + 5t

(C) 8(t + 5)

(D) 13t

Part B

Answer Part A before Part B — Part B asks about your reasoning.

Which reasoning shows why your answer to Part A is correct?

(A) The 5 dollar fee is paid for each ticket, so 5 is the coefficient: 8 + 5t.

(B) The 8 is the coefficient because it is paid for each ticket, and the 5 is a constant because it is paid one time. This gives 8t + 5, so an order of 6 tickets costs 8 × 6 + 5 = 53 dollars.

(C) Add the fee to the number of tickets first, then multiply by the ticket price: 8(t + 5).

(D) Combine 8 and 5 into a single coefficient because both are numbers: 13t.

Question 8 SELECT ALL THAT APPLY

Select ALL statements that are true about the algebraic expression 7n + 4.

Mark the box next to EVERY answer that is true. More than one is correct.

[A] The variable is n.

[B] The coefficient of the variable term is 7.

[C] The constant is 4.

[D] When n = 3, the expression has a value of 25.

[E] When n = 3, the expression has a value of 33.

[F] The term 7n means 7 plus n.

Part C — Show Your Thinking

Answer in writing, the way the state test's constructed responses work.

Question 9 WRITTEN RESPONSE · 2 POINTS

Field day needs one $4.25 item per student plus a one-time $23.50 shipping fee. Write the expression, then find the cost for 30 students AND for 60 students. Does doubling the students double the cost? Explain.

Write your answer in complete sentences. Show or explain your mathematical thinking.

When you finish, check your reasoning with your teacher or family. Your teacher has the scoring guide for the written responses.