MSTAR PRACTICE WORKSHEET

Lesson 7-3: Understand Absolute Value of Rational Numbers

Grade 6 Mathematics · Standard 6.NOS.8

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

What is the absolute value of -9?

(A) -9

(B) 0

(C) 1

(D) 9

Question 2 SELECTED RESPONSE · 1 POINT

Which integer has the GREATEST absolute value: -3, 7, -5, 2?

(A) -5

(B) -3

(C) 2

(D) 7

Question 3 SELECTED RESPONSE · 1 POINT

What is |0|?

(A) 1

(B) -1

(C) 0

(D) There is no answer

Question 4 SELECTED RESPONSE · 1 POINT

What is |−2.5|?

A 0

B 2.5

C −2.5

D 25

Question 5 SELECTED RESPONSE · 1 POINT

What is |−3/4|?

A 0

B 3/4

C −3/4

D 4/3

Question 6 SELECTED RESPONSE · 1 POINT

Which statement about absolute value is TRUE?

A |-4| = |4| because both are 4 units from zero

B |-4| = -4 because the number is negative

C |-4| = 0 because negatives cancel out

D |4| > |-4| because positive is always bigger

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

What is the value of |−12|?

Fill in the bubble next to the one best answer.

(A) 0

(B) 1/12

(C) 12

(D) −12

Part B

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

Why can an absolute value never be negative?

(A) Negative signs cancel out automatically.

(B) The bars change every number to a positive.

(C) Absolute value always adds the number to itself.

(D) It measures distance from zero, and a distance is never negative.

Question 8 WRITTEN RESPONSE · 2 POINTS

Type II Reasoning: Bigger Absolute Value, Bigger Number?

> Owen compared −8 and −3. He wrote: 'Since |−8| = 8 and |−3| = 3, and 8 > 3, then −8 > −3.'

Explain Owen's misconception and state the correct comparison.

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

Part C — Show Your Thinking

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

Question 9 WRITTEN RESPONSE · 2 POINTS

A submarine is at -150 meters and a bird is flying at +150 meters. A student says the submarine is closer to sea level because -150 is less than 150. Is the student correct? Explain using absolute value.

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.