MSTAR PRACTICE WORKSHEET

Lesson 6-9: Divide Whole Numbers by Fractions

Grade 6 Mathematics · Standard 6.NOS.1

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 6 ÷ 1/3?

(A) 2

(B) 3

(C) 6/3

(D) 18

Question 2 SELECTED RESPONSE · 1 POINT

What is 3 ÷ 1/5?

(A) 3/5

(B) 5/3

(C) 8

(D) 15

Question 3 SELECTED RESPONSE · 1 POINT

What is 10 ÷ 1/4?

(A) 2.5

(B) 10/4

(C) 14

(D) 40

Question 4 SELECTED RESPONSE · 1 POINT

What is 5 ÷ 1/2?

(A) 2.5

(B) 5/2

(C) 7

(D) 10

Question 5 SELECTED RESPONSE · 1 POINT

What is 6 ÷ 2/3?

(A) 2/18

(B) 4

(C) 9

(D) 12

Question 6 SELECTED RESPONSE · 1 POINT

Detective Park has 4 cups of flour. Each batch of evidence-cookies needs 1/2 cup. How many batches can he make?

(A) 2

(B) 4

(C) 6

(D) 8

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 6 ÷ 3/4?

Fill in the bubble next to the one best answer.

(A) 2

(B) 2/9

(C) 4 1/2

(D) 8

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) Flip the whole number instead of the divisor: 1/6 × 4/3 = 4/18 = 2/9.

(B) Write 6 as 6/1 and multiply by the reciprocal of the divisor: 6/1 × 4/3. Cross-cancel the common factor 3 to get 2/1 × 4/1 = 8.

(C) Multiply straight across without using the reciprocal: 6/1 × 3/4 = 18/4 = 4 1/2.

(D) Divide 6 by the numerator of the divisor and ignore the denominator: 6 ÷ 3 = 2.

Question 8 SELECT ALL THAT APPLY

Select ALL statements that are true about the expression 10 ÷ 2/5.

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

[A] The reciprocal of the divisor 2/5 is 5/2.

[B] The expression can be rewritten as 10/1 × 5/2.

[C] The quotient is 25.

[D] The quotient is 4.

[E] The quotient is greater than 10 because the divisor is less than 1.

[F] The reciprocal of 2/5 is 2/5.

Part C — Show Your Thinking

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

Question 9 WRITTEN RESPONSE · 2 POINTS

A pizza shop has 8 whole pizzas. Each serving is 2/3 of a pizza. How many servings can they make? Write and solve an equation, then explain why the answer is greater than 8.

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.