MSTAR PRACTICE WORKSHEET

Lesson 4-4: Find and Compare with Percentages

Grade 6 Mathematics · Standard 6.AT.4

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 20% of 150?

(A) 20

(B) 30

(C) 35

(D) 75

Question 2 SELECTED RESPONSE · 1 POINT

What is 50% of 84?

(A) 34

(B) 42

(C) 50

(D) 168

Question 3 SELECTED RESPONSE · 1 POINT

What is 10% of 320?

(A) 3.2

(B) 32

(C) 64

(D) 320

Question 4 SELECTED RESPONSE · 1 POINT

What percent of 50 is 15?

(A) 15%

(B) 30%

(C) 35%

(D) 50%

Question 5 SELECTED RESPONSE · 1 POINT

An arcade prize costs 240 tickets. If you have a coupon for 15% off, how many tickets do you save?

(A) 15 tickets

(B) 24 tickets

(C) 36 tickets

(D) 204 tickets

Question 6 SELECTED RESPONSE · 1 POINT

A student scored 72 out of 90 on a test. What percent did they score?

(A) 72%

(B) 75%

(C) 80%

(D) 90%

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

At West Middle School, 45% of the 360 sixth-grade students participate in after-school sports. How many sixth-grade students participate in sports?

Fill in the bubble next to the one best answer.

(A) 144 students

(B) 160 students

(C) 162 students

(D) 180 students

Part B

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

Which calculation method accurately justifies this solution in Part A?

(A) Multiply the decimal representation of the percent by the whole: 0.45 × 360 = 162.

(B) Subtract 45 from 360: 360 - 45 = 315.

(C) Divide 360 by 45: 360 ÷ 45 = 8.

(D) Multiply 360 by 4.5: 360 × 4.5 = 1,620.

Question 8 WRITTEN RESPONSE · 2 POINTS

Type II Reasoning: Compare Percent Discounts

> Store A offers a $120 skateboard at 30% off. Store B offers the same $120 skateboard with a $40 instant manufacturer coupon.

Which store offers the lower final price? Justify your decision by showing the savings and final price at both stores.

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 class has 32 students. 25% are in the math club, 50% are in the reading club, and 12.5% are in both. How many students are in each group? Can the total of all three groups be more than 32? Explain why or why not.

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.