

# North Dakota NDSA Grade 7 Math Quizzes

*Quick Topic Assessments with Answer Key*

**Dr. A. Nazari**

Copyright © 2026 Dr. A. Nazari

Published by View Math Education

ViewMath.com

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

The information in this book is distributed on an “as is” basis, without warranty. While every precaution has been taken in the preparation of this work, neither the author nor the publisher shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this book.

*Copyright © 2026*

---

QUICK QUIZZES FOR EVERY TOPIC

# Grade 7 Math Quizzes

Topic Quizzes • Chapter Reviews • Answer Key

---

*Quick, focused quizzes are one of the best ways to find out what you really know — and what you still need to work on.*

*This book has a short quiz for every Grade 7 math topic. Each one takes about 10–15 minutes and covers the most important skills for that section. Take a quiz, score it, and see exactly where you stand.*

*Use it after studying a topic, the night before a test, or anytime you want a fast check-in on your math skills.*



## Take the Quiz

*10–15 minutes  
per quiz*



## Score It

*Check every answer  
in the key*



## Review & Retry

*Study what you missed  
then quiz again*

CHAPTER

1

# Ratios and Proportional Relationships

## ★ What's Inside ★

Quiz 1: Unit Rates with Fractions ..... 3



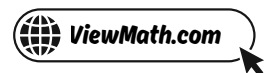
PREVIEW



Get Online



Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)




 CHAPTER 1

# Quiz 1

## Unit Rates with Fractions

 Name: \_\_\_\_\_

 Date: \_\_\_\_\_

 Score: \_\_\_\_\_ / 8

- 1 A jogger runs  $\frac{3}{4}$  of a mile in  $\frac{1}{2}$  hour. What is the jogger's **unit rate** in miles per hour?

$$\begin{array}{c} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \\ \div \\ \boxed{\phantom{0}} \boxed{\phantom{0}} \\ = \underline{\hspace{2cm}} \text{ mph} \end{array}$$

- 2 A recipe uses  $\frac{2}{3}$  cup of cocoa for  $\frac{1}{4}$  batch. How much cocoa is needed for **one full batch**?

A.  $\frac{1}{6}$  cup

B.  $\frac{8}{3}$  cups

C.  $\frac{2}{12}$  cup

D.  $2\frac{2}{3}$  cups

- 3 Which painter is faster? Write  $>$ ,  $<$ , or  $=$  in the circle.

Maya:  $\frac{2}{5}$  room in  $\frac{1}{3}$  hr

Leo:  $\frac{3}{4}$  room in  $\frac{1}{2}$  hr

Maya's rate



Leo's rate

- 4 Complete the table. Each row shows the **same rate**.

Gallons	$\frac{1}{2}$	1
Miles	$\frac{5}{6}$	_____



Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)



Unit rate (miles per gallon): \_\_\_\_\_

- 5 True or False: A printer that uses  $\frac{3}{8}$  of a cartridge for  $\frac{1}{4}$  ream of paper uses **more than** 1 full cartridge per ream.

True       False

- 6 A snail crawls  $\frac{5}{8}$  meter in  $\frac{3}{4}$  hour. A beetle crawls  $\frac{7}{10}$  meter in  $\frac{4}{5}$  hour. Which creature is faster, and by how much?



Faster creature & difference: \_\_\_\_\_

\_\_\_\_\_

### Bonus Challenge

This is a bonus question for extra credit. Give it your best attempt.

- 7 A mystery smoothie recipe uses  $\frac{a}{b}$  cups of fruit per  $\frac{1}{3}$  cup of yogurt. The unit rate is exactly  $2\frac{1}{4}$  cups of fruit per cup of yogurt. What fraction  $\frac{a}{b}$  is in the recipe? Show your work.

Show your work

### Score Summary

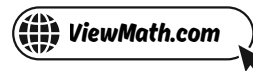
I got \_\_\_\_\_ out of \_\_\_\_\_ correct.



Get Online



Find more at  
[ViewMath.com/Grade7](http://ViewMath.com/Grade7)



CHAPTER

2

# Operations with Rational Numbers

## ★ What's Inside ★

Quiz 2: Integers and Their Opposites ..... 7



PREVIEW



Get Online



Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)



 CHAPTER 3

## Quiz 2

### Integers and Their Opposites

 Name: \_\_\_\_\_

 Date: \_\_\_\_\_

 Score: \_\_\_\_\_ / 8

- 1 Point  $A$  is shown on the number line below. What integer does  $A$  represent, and what is its **opposite**?



$A =$ : \_\_\_\_\_

Opposite =: \_\_\_\_\_

- 2 Complete the table.

<b>Number</b>	-7	_____	0
<b>Opposite</b>	_____	-4	_____
<b>Absolute Value</b>	_____	4	_____

- 3 Which pair of integers has a sum of 0?

A. 5 and 5

B. -3 and 3

C. -7 and -7

D. 4 and -3

- 4 Compare. Write  $>$ ,  $<$ , or  $=$  in the circle.

$|-9|$



$|6|$



Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)



- 5 A scuba diver descends 12 feet below sea level, then ascends 12 feet. Write each action as an integer and find the final position.

Final position: \_\_\_\_\_

- 6 True or False:  $|-5| = -5$ .

True       False

### Bonus Challenge

This is a bonus question for extra credit. Give it your best attempt.

- 7 List **all** integers  $n$  where  $|n| \leq 3$ . Then find their sum.

 Show your work

### Score Summary

I got \_\_\_\_\_ out of \_\_\_\_\_ correct.



Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)



# *Answer Key & Explanations*



## Answer Key

First try each quiz on your own, then check your work here.

### Chapter 1

#### Quiz 1: Unit Rates with Fractions

1  $1\frac{1}{2}$  mph

2 D ( $2\frac{2}{3}$  cups)

3  $<$  (Maya is slower)

4  $1\frac{2}{3}$  mi; unit rate =  $1\frac{2}{3}$  mpg

5 True

6 Beetle; faster by  $\frac{1}{24}$  m/hr

7  $\frac{3}{4}$

#### Explanations

1 Divide distance by time:  $\frac{3}{4} \div \frac{1}{2}$ . Keep-Change-Flip:  $\frac{3}{4} \times \frac{2}{1} = \frac{6}{4} = \frac{3}{2} = 1\frac{1}{2}$  mph. Check: in  $\frac{1}{2}$  hr at  $1\frac{1}{2}$  mph you go  $\frac{3}{2} \times \frac{1}{2} = \frac{3}{4}$  mi. ✓

2 Divide cocoa by batches:  $\frac{2}{3} \div \frac{1}{4} = \frac{2}{3} \times \frac{4}{1} = \frac{8}{3} = 2\frac{2}{3}$  cups. Choice B shows the improper form, but D is the simplified mixed number. Common mistake: multiplying instead of dividing gives  $\frac{2}{3} \times \frac{1}{4} = \frac{1}{6}$  (choice A).

3 Maya:  $\frac{2}{5} \div \frac{1}{3} = \frac{2}{5} \times 3 = \frac{6}{5} = 1\frac{1}{5}$  rooms/hr. Leo:  $\frac{3}{4} \div \frac{1}{2} = \frac{3}{4} \times 2 = \frac{6}{4} = 1\frac{1}{2}$  rooms/hr. Since  $1\frac{1}{5} < 1\frac{1}{2}$ , Maya is slower. Common mistake: comparing the fractions without finding unit rates.

4 Find the unit rate:  $\frac{5}{6} \div \frac{1}{2} = \frac{5}{6} \times 2 = \frac{10}{6} = \frac{5}{3} = 1\frac{2}{3}$  miles per gallon. For 1 gallon the answer is the unit rate itself:  $1\frac{2}{3}$  miles. Check:  $\frac{5}{3} \times \frac{1}{2} = \frac{5}{6}$ . ✓



Get Online



Find more at  
[ViewMath.com/Grade7](http://ViewMath.com/Grade7)



 ViewMath.com



5 Find the unit rate:  $\frac{3}{8} \div \frac{1}{4} = \frac{3}{8} \times 4 = \frac{12}{8} = \frac{3}{2} = 1\frac{1}{2}$  cartridges per ream. Since  $1\frac{1}{2} > 1$ , the statement is true. Common mistake: dividing  $\frac{1}{4} \div \frac{3}{8}$  (wrong order) gives  $\frac{2}{3}$ , which would incorrectly suggest "False."

6 Snail:  $\frac{5}{8} \div \frac{3}{4} = \frac{5}{8} \times \frac{4}{3} = \frac{20}{24} = \frac{5}{6}$  m/hr. Beetle:  $\frac{7}{10} \div \frac{4}{5} = \frac{7}{10} \times \frac{5}{4} = \frac{35}{40} = \frac{7}{8}$  m/hr. Difference:  $\frac{7}{8} - \frac{5}{6} = \frac{21}{24} - \frac{20}{24} = \frac{1}{24}$  m/hr. The beetle is faster by  $\frac{1}{24}$  m/hr. ✓

7 Work backward: unit rate =  $\frac{a}{b} \div \frac{1}{3}$ , so  $\frac{a}{b} = 2\frac{1}{4} \times \frac{1}{3} = \frac{9}{4} \times \frac{1}{3} = \frac{9}{12} = \frac{3}{4}$ . Check:  $\frac{3}{4} \div \frac{1}{3} = \frac{3}{4} \times 3 = \frac{9}{4} = 2\frac{1}{4}$ . ✓

## Chapter 2

### Quiz 2: Integers and Their Opposites

1  $A = -4$ ; Opposite = 4

2 7, 7; 4; 0, 0

3  $B (-3 \text{ and } 3)$

4  $>$

5 0 (sea level)

6 False

7 Integers:  $-3, -2, -1, 0, 1, 2, 3$ ; Sum = 0

### Explanations

1 Point  $A$  is at  $-4$  on the number line. The opposite of  $-4$  is 4 because both are 4 units from 0 on opposite sides. Check:  $-4 + 4 = 0$ . ✓

2 The opposite of  $-7$  is 7, and  $|-7| = 7$ . If the opposite is  $-4$ , the number is 4, and  $|4| = 4$ . The opposite of 0 is 0, and  $|0| = 0$ . Zero is its own opposite.

3 A number and its opposite always sum to 0.  $-3 + 3 = 0$  because  $-3$  and 3 are opposites (additive inverses). Common mistake: choosing  $A$  — same number twice is not an opposite pair (unless it's 0).



Get Online



Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)



4  $|-9| = 9$  and  $|6| = 6$ . Since  $9 > 6$ , we have  $|-9| > |6|$ . Absolute value strips the sign — it only measures distance from 0.

5 Descent:  $-12$  ft. Ascent:  $+12$  ft.  $-12 + 12 = 0$ . The diver is back at sea level because descent and ascent are opposite actions. ✓

6 Absolute value is always non-negative (zero or positive).  $|-5| = 5$ , not  $-5$ . The absolute value measures distance from 0, which is always  $\geq 0$ . Common mistake: keeping the negative sign.

7 The integers with absolute value  $\leq 3$  are  $-3, -2, -1, 0, 1, 2, 3$  (seven integers). Each positive integer pairs with its opposite:  $(-3) + 3 = 0$ ,  $(-2) + 2 = 0$ ,  $(-1) + 1 = 0$ , plus 0. Total: 0. ✓



**Well done checking your answers!**

Keep practicing to strengthen your skills.

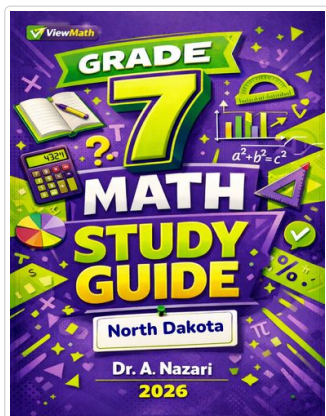


Find more at  
[ViewMath.com/Grade7](https://www.viewmath.com/Grade7)



**Great Job! Keep Learning with ViewMath!**

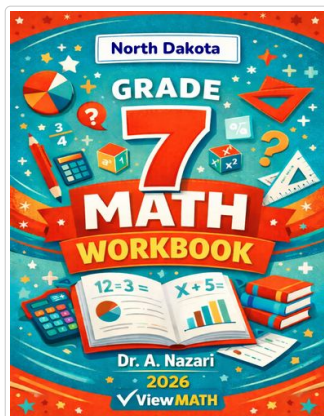
Keep up the great work! Visit [viewmath.com/ND-Grade7](http://viewmath.com/ND-Grade7) for free lessons, quizzes, and more.



Study Guide



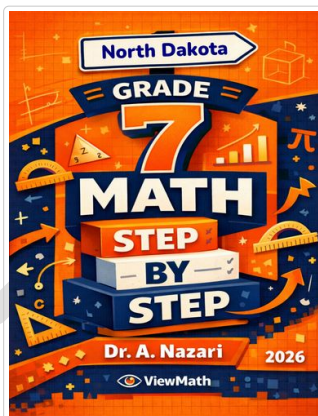
Scan Me



Workbook



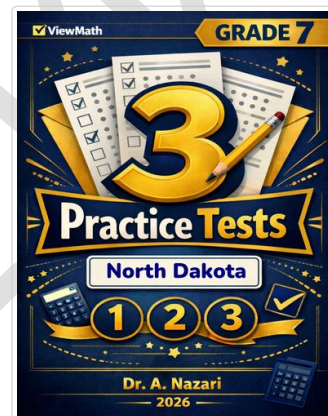
Scan Me



Step-by-Step



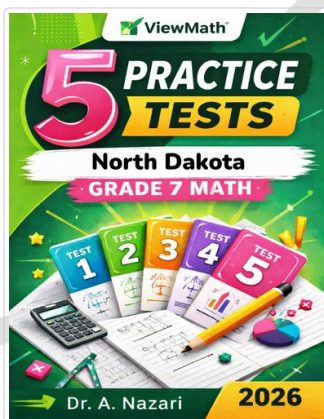
Scan Me



3 Practice Tests



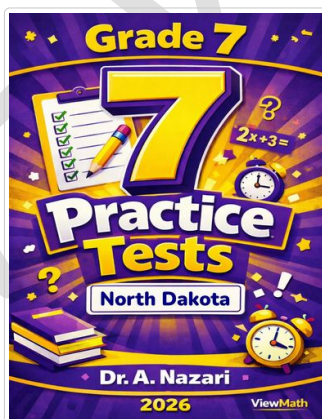
Scan Me



5 Practice Tests



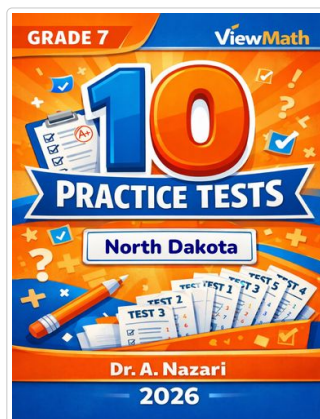
Scan Me



7 Practice Tests



Scan Me



10 Practice Tests



Scan Me



Find more at [ViewMath.com/Grade7](http://ViewMath.com/Grade7)



THANK YOU

# Enjoyed This Preview?

## Get the Full Book!

*This preview shows just a small sample of what's inside.*

*The complete book includes:*

- ✓ *All chapters and topics*
- ✓ *Hundreds of practice problems*
- ✓ *Complete answer key with explanations*
- ✓ *Colorful visuals and step-by-step examples*
- ✓ *Reference sheets and progress trackers*

 Visit us at [ViewMath.com](https://www.viewmath.com) for free resources and more books!