

Important Concepts . . .

Preview Review



Mathematics Grade 9

W1 - Quiz

Important Concepts of Grade 9 Mathematics

W1 - Lesson 1	Powers
W1 - Lesson 2	Exponents
W1 - Lesson 3	Rational Numbers
W1 - Lesson 4	Order of Operations
W1 - Lesson 5	Square Roots of Rational Numbers
W1 - Review	
W1 - Quiz	
W2 - Lesson 6	Graphing Linear Relations
W2 - Lesson 7	Solving Linear Relations
W2 - Lesson 8	Linear Inequalities
W2 - Lesson 9	Polynomials
W2 - Lesson 10	Surface Area of 3D Objects
W2 - Review	
W2 - Quiz	
W3 - Lesson 11	Properties of Circles
W3 - Lesson 12	Polygons and Scale Diagrams
W3 - Lesson 13	Rotational Symmetry
W3 - Lesson 14	Representing Data
W3 - Lesson 15	Probability
W3 - Review	
W3 - Quiz	

Materials Required

Paper
Pencil
Calculator

**No Textbook
Required**

**This is a stand-
alone course.**

Mathematics Grade 9

Version 6

Preview/Review W1 - Quiz

ISBN: 978-1-927090-00-8

Publisher: Alberta Distance Learning Centre

Written by: Lynee Fyfe

Reviewed by: Danielle Winter

Project Coordinator: Danielle Winter

Preview/Review Publishing Coordinating Team: Julie Reschke



Alberta Distance Learning Centre has an Internet site that you may find useful. The address is as follows: <http://www.adlc.ca>

The use of the Internet is optional. Exploring the electronic information superhighway can be educational and entertaining. However, be aware that these computer networks are not censored. Students may unintentionally or purposely find articles on the Internet that may be offensive or inappropriate. As well, the sources of information are not always cited and the content may not be accurate. Therefore, students may wish to confirm facts with a second source.

ALL RIGHTS RESERVED

Copyright © 2011, by Alberta Distance Learning Centre, 4601-63 Avenue, Barrhead, Alberta, Canada, T7N 1P4. Additional copies may be obtained from Alberta Distance Learning Centre.

No part of this courseware may be reproduced or transmitted in any form, electronic or mechanical, including photocopying (unless otherwise indicated), recording, or any information storage and retrieval system, without the written permission of Alberta Distance Learning Centre.

Every effort has been made both to provide proper acknowledgement of the original source and to comply with copyright law. If cases are identified where this effort has been unsuccessful, please notify Alberta Distance Learning Centre so that appropriate corrective action can be taken.

IT IS STRICTLY PROHIBITED TO COPY ANY PART OF THESE MATERIALS UNDER THE TERMS OF A LICENCE FROM A COLLECTIVE OR A LICENSING BODY.

Preview/Review Concepts for Grade Nine Mathematics



W1 - Quiz

QUIZ

This quiz should take between 25 and 40 minutes.

A pencil, eraser, and a scrap piece of paper (for rough work) are the only materials allowed for the quiz.

Teacher may choose to weight each question differently.

Print your name neatly on the quiz.

Complete all questions on the quiz.

Hand in the quiz when you complete it.

Week 1 - Quiz

Part 1: Multiple-Choice

Be sure to read each question carefully. Write the letter of the **best** answer in the blank in front of each question. Each multiple choice is worth 1 mark.

- _____ 1. Substitute the x with the integer that will make the statement below a true statement.

$$p^x p^2 = p^{-8}$$

- A. 4
 - B. -10
 - C. 6
 - D. 8
- _____ 2. Simplify $(x^3)(y^2)(x^5)(z^2)$.

- A. $(x^3)(y^2)(x^5)(z^2)$
- B. $(x^2)(y^2)(z^2)$
- C. $(xyz)^{12}$
- D. $(x^8)(y^2)(z^2)$

- _____ 3. Simplify the expression below.

$$10^3 \times 10^7$$

- A. 10^4
 - B. 10^{10}
 - C. 10^{21}
 - D. 100^{21}
- _____ 4. Which of the following decimal numerals is equivalent to $\frac{5}{8}$.
- A. 0.625
 - B. 0.58
 - C. 58
 - D. 62.5

- _____ 5. The quotient of $\frac{7^{10}}{7^2}$ is:
- A. 7^{12}
 - B. 7^8
 - C. 7^{20}
 - D. 7^5
- _____ 6. The simplified answer to $(-2 \times 3^5)^3$ is:
- A. -6×3^8
 - B. 6×3^8
 - C. 8×3^{15}
 - D. -8×3^{15}
- _____ 7. Which fraction is between -0.34 and -0.36 ?
- A. $\frac{-17}{50}$
 - B. $\frac{-9}{25}$
 - C. $\frac{-7}{20}$
 - D. $\frac{35}{100}$
- _____ 8. Which is the best estimate for $\sqrt{1.6}$?
- A. 2.6
 - B. 1.3
 - C. 0.8
 - D. 0.4
- _____ 9. Which rational number is a non-perfect square?
- A. $\frac{1}{25}$
 - B. 0.16
 - C. 0.9
 - D. $\frac{121}{4}$

_____ 10. Which represents the numbers in correct ascending order?

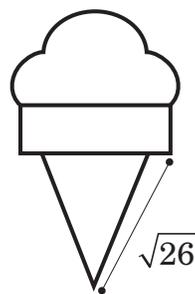
- A. $0.41, -0.33, 0.95, \frac{35}{50}, 2\frac{1}{2}, -1.2$
- B. $-1.2, -\frac{35}{50}, -0.33, 0.41, 0.95, 2\frac{1}{2}$
- C. $-2\frac{1}{2}, 0.95, 0.41, -0.33, -\frac{35}{50}, -1.2$
- D. $-\frac{35}{50}, -0.33, -1.2, 0.41, 0.95, 2\frac{1}{2}$

_____ 11. Which operation should you do first in the following expression?

$$-2.3 + [1.5 - (-4.3)] \div (-0.4)$$

- A. Divide -4.3 by -0.4
- B. Add -2.3 to 1.5
- C. Multiply 1.5 by -4.3
- D. Subtract -4.3 from 1.5

_____ 12. Use the picture of the ice cream cone to answer the question below.



- A. F
- B. E
- C. H
- D. G

Part 2: Short Answer

Show all your work. Simplify the answer to lowest terms when necessary.

1. Write $\frac{(3)^5}{(3)^3}$ in expanded notation, and find the value. (2 marks)

2. Place these rational and decimal numerals in order from least to greatest. (2 marks)

$$\frac{2}{5} \quad -0.39 \quad \frac{3}{7} \quad -\frac{3}{8} \quad -\frac{2}{5}$$

3. Divide the power, and show your work. (2 marks)

$$\frac{(-3)^{10}}{(-3)^6}$$

4. Identify the error(s) made, and then simplify the question correctly. (3 marks)

$$\begin{aligned} & (-2 \times 5^3)^4 \\ & = 8 \times 5^7 \end{aligned}$$

5. Insert the symbol $<$, $>$, or $=$ to make the following true. (2 marks)

a. $-\frac{5}{7}$ -0.38

b. 2.753 $\frac{24}{10}$

6. Identify a fraction and a decimal between -0.2 and -0.3 . (2 marks)

7. Answer the following: (2 marks)

a. What is the number with a square root of 6.1? _____

b. What is the value for $\sqrt{0.1369}$? _____

