Integers and Absolute Value Assessment

Student Name: _____	**Class:** _____
Student ID: _____	**Date:** {{DATE}}

Assessment Details

Duration: 60 minutes	**Total Marks:** 100
Topics Covered:	• Integers • Absolute Value • Real-life Applications

Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is permitted except where stated otherwise.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Section 1: Easy Questions [20 marks]

Question 1 [2 marks]

What is the absolute value of the number -5?

A) -5

B) 5

C) 0

D) 10

Question 2 [2 marks]

The set of integers includes all whole numbers, both _____ and negative, including zero.

Question 3 [4 marks]

Provide an example of a real-life scenario where integers are used.

Section 2: Medium Questions [40 marks]

Question 4 **[4 marks]**

If x = -3, what is the value of |x|?

A) -3

B) 3

C) 0

D) 1

Question 5 **[8 marks]**

Explain the difference between the absolute value of a number and the number itself. Provide an example.

Question 6 **[4 marks]**

When adding two integers with the same sign, we _____ their absolute values and keep the same sign.

Section 3: Hard Questions [40 marks]

Question 7 [10 marks]

Solve for x in the equation |x| + 2 = 7.

Question 8 [4 marks]

What is the result of subtracting a negative integer from a positive integer?

A) Always negative

B) Always positive

C) Depends on the absolute values of the integers

D) Always zero

Question 9 [6 marks]

In real-life scenarios, understanding integers and their operations is crucial for _____ and financial planning.

Activity 1: Real-Life Scenario [10 marks]

Imagine you are a bank manager, and you need to calculate the balance of a customer's account. The customer has deposited $100 and withdrawn $50. However, they also have a pending transaction of -$20. Calculate the final balance using integers and absolute values.

Activity 2: Number Line [10 marks]

Draw a number line and plot the following integers: -3, 0, 2, and 5. Then, calculate the absolute value of each integer and label it on the number line.

Marking Guide

Multiple Choice Questions: 1 point each

Short Answer Questions: 5 points each, based on accuracy and completeness of the answer

Fill-in-the-Blank Questions: 1 point each for correct completion

Rubric for Short Answer Questions:

- Accuracy (3 points): Is the answer correct?
- Completeness (1 point): Does the answer fully address the question?
- Example/Explanation (1 point): Is a relevant example or explanation provided?

Conclusion

Congratulations on completing the Integers and Absolute Value assessment handout! Remember to review your answers and ask your teacher for feedback. This assessment is designed to help you understand and apply integers and absolute values in real-life scenarios. Keep practicing, and you will become proficient in using these mathematical concepts!