ExamPath

CLASS 9 MATHEMATICS · FBISE · UNIT 1

Unit 1: Real Numbers — Beginner Practice

15 multiple-choice questions Suggested time: **15 minutes** 1 mark each

Name: Date: Score: / 15

Circle one answer for each question. The answer key with explanations is on the last pages, so try every question before you check. These are practice questions, not official FBISE papers.

1. Which statement is correct?

(A) Every natural number is a whole number
(B) Every whole number is a natural number
(C) 0 is a natural number
(D) Negative integers are whole numbers

2. What is the value of 2^{-3}?

(A) −8
(B) −6
(C) 8
(D) 1/8

3. If $3 < 5$, which statement must be true?

(A) $3 + 2 > 5 + 2$
(B) $3 + 2 = 5 + 2$
(C) $5 + 2 < 3 + 2$
(D) $3 + 2 < 5 + 2$

4. Which statement about the number line is true?

(A) Positive numbers lie to the left of 0
(B) Negative numbers lie to the right of 0
(C) Every real number has a point on it
(D) Only integers have points on it

5. Which pair consists of a number and its multiplicative inverse?

(A) 5 and −5
(B) 5 and 1/5
(C) 5 and 0
(D) 5 and 1

6. Simplify $5^4 \div 5^2$.

(A) 5^6
(B) 5^2
(C) 1^2
(D) 5^8

7. Which expression is equal to $5(x + 2)$?

(A) $5x + 2$
(B) $x + 10$
(C) $5x + 10$
(D) $5x + 7$

8. $4 \times 7 = 7 \times 4$ is an example of which property?

(A) Associative
(B) Distributive
(C) Commutative
(D) Identity

9. What is the value of 9^(1/2)?

(A) 4.5
(B) 81
(C) 18
(D) 3

10. What is the additive identity of the real numbers?

(A) 1
(B) 0
(C) −1
(D) 2

11. Which set contains exactly the numbers 1, 2, 3, …?

(A) Natural numbers
(B) Whole numbers
(C) Integers
(D) Rational numbers

12. In the expression √25, the number 25 is called the:

(A) Index
(B) Radical sign
(C) Radicand
(D) Exponent

13. a + (−a) = 0 is an example of which property?

(A) Identity
(B) Additive inverse
(C) Commutative
(D) Closure

14. Which of these is an irrational number?

(A) √16
(B) √2
(C) 0.25
(D) 7/3

15. The multiplicative identity of the real numbers is:

(A) 0
(B) −1
(C) 10
(D) 1

Answer key

Unit 1 · Beginner Practice

1 A	**2** D	**3** D	**4** C	**5** B
6 B	**7** C	**8** C	**9** D	**10** B
11 A	**12** C	**13** B	**14** B	**15** D

Explanations

1. A. Every natural number is a whole number
Whole numbers are 0, 1, 2, ... so they contain every natural number plus 0. The reverse is false because 0 is not natural.

2. D. 1/8
A negative exponent gives the reciprocal: $2^{-3} = 1/2^{3} = 1/8$.

3. D. 3 + 2 < 5 + 2
Adding the same number to both sides keeps the inequality sign: 5 < 7.

4. C. Every real number has a point on it
Positives lie right of 0 and negatives left. Every real number, including fractions and irrationals, has its own point.

5. B. 5 and 1/5
5 × 1/5 = 1. The pair 5 and −5 are additive inverses.

6. B. 5^{2}
Same base: subtract the powers. $5^{4} \div 5^{2} = 5^{4-2} = 5^{2}$.

7. C. 5x + 10
By the distributive property, 5(x + 2) = 5x + 10. The 5 multiplies both terms.

8. C. Commutative
Changing the order does not change the product. This is the commutative property.

9. D. 3
9^(1/2) is the principal square root of 9, which is 3.

10. B. 0
Adding 0 to any number leaves it unchanged: a + 0 = a.

11. A. Natural numbers
Natural numbers start from 1. Whole numbers also include 0.

12. C. Radicand
The symbol √ is the radical sign. The number under it is the radicand.

13. B. Additive inverse
−a is the additive inverse of a, because the two add to give 0.

14. B. √2
√16 = 4, 0.25 = 1/4 and 7/3 are fractions of integers, so they are rational. √2 cannot be written as a/b.

15. D. 1
Multiplying by 1 leaves a number unchanged: a × 1 = a.

Free practice from ExamPath (exampath.org). You may print and share for study. Take this test online with a timer and instant checking at exampath.org.