CITIUS

Operations on Sets; Rational Numbers; Exponents; Squares and Square Roots; Cubes and Cube Roots; and Playing with Numbers.

WORKSHEET 1

Question 1	How many rational numbers are there between $\frac{2}{10}$ and $\frac{5}{10}$?
	• infinite
	• 3
	• 2
	• 5
Question 2	What will be the number of zeroes in the square of 202?
	• 3
	• 2
	• 0
	• 1
Question 3	What is the cube root of 343?
	• 9
	• 11
	• 3
	• 7

Question 4	The cardinal number of set A = $\{x \mid x^2 + 5x + 6 = 0, x \in N\}$ is • 3 • 4 • 0 • 2
Question 5	Between which two numbers will $-6/4$ lie on the number line? • 0 and -1 • -1 and -2 • -2 and -3 • -3 and -4
Question 6	If U = $\{a, b, c, \ldots, g\}$, A = $\{a, c, d\}$ and B = $\{c, e, f\}$, then $A \cap B$ is • $\{c\}$ • $\{e\}$ • $\{f\}$ • $\{a\}$
Question 7	The smallest prime number is • 1 • 2 • 0 • 3

Question 8	The cube of an even number is always _____. • odd • even • prime • none of above
Question 9	A cubical room has an area of 9261 cubic metres. What is the length of the side of the room? • 21 m • 24 m • 18.9 m • 12.5 m
Question 10	If the sum of the digits of a number is subtracted from the number, then the resulting number is always divisible by • 2 • 5 • 8 • 9

- x -

Answers

Answer 1	infinite
Answer 2	2
Answer 3	7
Answer 4	0
Answer 5	-1 and -2
Answer 6	$\{c\}$
Answer 7	2
Answer 8	even
Answer 9	21 m
Answer 10	9