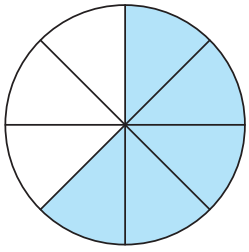
CITIUS

Sets; Integers; Fractions; Decimals; and Rational Numbers

WORKSHEET 1

Question 1	Two sets A and B are said to be equivalent if • $n(A) \neq n(B)$ • $n(A) = n(B)$ • $n(A) - n(B) = 1$ • $n(B) = n(A) - 1$
Question 2	The fraction $\frac{(p+q)}{q}$ equals • p • $\frac{p}{q} + 1$ • $\frac{p}{q} + q$ • $\frac{p}{q} + p$
Question 3	For what value of 'a' is the number '$-\frac{11}{a}$' not a rational number? • –1 • 1 • 0 • 10

Question 4	What is the result of adding the difference of 3.003 and 2.05 to their sum? • 6.006 • 60.06 • 600.6 • 0.6060
Question 5	Building A is 45 metres above sea level and Building B is 25 metres below sea level. What is the difference of level in metres between the two places? • 70 m • 20 m • 60 m • -20 m
Question 6	What is the quotient when a non-zero rational number is divided by its additive inverse? • 0 • –1 • 1 • 10
Question 7	What is a complex fraction? • A fraction that has one at the bottom • A fraction in which the numerator, denominator or both contain a fraction • A fraction that has zero in the numerator or denominator • A fraction that is hard to understand

Question 8	Each object in a set is called: • a list • an element • a notation • None of above
Question 9	$\frac{p}{q}$ and $\frac{r}{s}$ are rational numbers. Then $\frac{p}{q}$ is the multiplicative inverse of $\frac{r}{s}$ if • $\frac{p}{q} = \frac{r}{s}$ • $\frac{p}{q} + \frac{r}{s} = 1$ • $\frac{p}{q} \times \frac{r}{s} = 1$ • $\frac{p}{q} + \frac{r}{s} = 0$
Question 10	What is the decimal representation of the shaded portion? • 0.375 • 0.625 • 0.667 • 0.750 

Answers

Answer 1	n (A) = n (B)
Answer 2	$\frac{p}{q} + 1$
Answer 3	0
Answer 4	6.006
Answer 5	70 m
Answer 6	–1
Answer 7	A fraction in which the numerator, denominator or both contain a fraction
Answer 8	an element
Answer 9	$\frac{p}{q} \times \frac{r}{s} = 1$
Answer 10	0.625