



CITIVUS

Sets, Number Systems, and Factors & Multiples

WORKSHEET 1

Theme	Sets, Number Systems, and Factors & Multiples
Question 1	If set $A = \{0\}$, then what is the cardinal number of A ? <ul style="list-style-type: none">• 0• 1• 2• infinite
Question 2	Set $R = \{0, 1, 2, 3, 1, 2, 3\}$, Set $S = \{1, 2, 3\}$. What is $R - S$? <ul style="list-style-type: none">• $\{\}$• $\{0\}$• $\{0, 1, 2, 3\}$• $\{1, 2, 3\}$
Question 3	What is the tabular form of the set $\{x \mid x \text{ is a prime number less than } 13\}$? <ul style="list-style-type: none">• $\{1, 2, 3, 5, 7\}$• $\{2, 3, 5, 7, 11\}$• $\{2, 3, 5, 7, 11, 13\}$• $\{1, 2, 3, 5, 7, 11\}$

Question 4	<p>What is the difference in the face values of '4' in 46,61,045?</p> <ul style="list-style-type: none"> • 0 • 3999600 • 3999960 • 3999996
Question 5	<p>How many times does the digit '5' occur in the tens place between the numbers 200 and 500?</p> <ul style="list-style-type: none"> • 27 • 30 • 40 • 100
Question 6	<p>How many whole numbers are there in between the predecessor of the largest 5-digit number and the successor of the smallest 6-digit number?</p> <ul style="list-style-type: none"> • 0 • 2 • 4 • 102
Question 7	<p>What is the smallest number that can be multiplied with 160, to get a 4-digit number divisible by 3?</p> <ul style="list-style-type: none"> • 7 • 8 • 9 • 10

Question 8	What is the sum of the prime numbers less than 15? <ul style="list-style-type: none">• 28• 40• 41• 57
Question 9	Which multiple of 66 is also a factor of it? <ul style="list-style-type: none">• 1• 33• 66• 132
Question 10	How many twin prime pairs are there up to 100? <ul style="list-style-type: none">• 6• 8• 14• 16

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Answers

Answer 1	1
Answer 2	{0}
Answer 3	{2, 3, 5, 7, 11}
Answer 4	0
Answer 5	30
Answer 6	2
Answer 7	9
Answer 8	41
Answer 9	66
Answer 10	8