



CITIVUS

Exponents; Algebraic Expressions; and Linear Equations and Inequalities

WORKSHEET 3

Question 1	<p>Sarah swam 7 times as many hours during summer break as she did during spring break. She swam a total of 56 hours during both breaks. How many hours did Sara swim during the spring break?</p> <ul style="list-style-type: none">• 49 hours• 9 hours• 8 hours• 7 hours
Question 2	<p>The number of solutions of a linear equation in one variable is _____.</p> <ul style="list-style-type: none">• 0• 1• 2• infinite
Question 3	<p>What is the value of 'x' for $5x - 13 < 2x - 3$, where $x \in \mathbb{N}$?</p> <ul style="list-style-type: none">• $\{\}$• $\{1, 2\}$• $\{1, 2, 3\}$• $\{0, 1, 2, 3\}$

Question 4	<p>The salary of Pankaj is ₹ $(4x + 3y)$. If he spends ₹ $(3x + y)$, what is his savings?</p> <ul style="list-style-type: none"> • ₹ $(7x + 4y)$ • ₹ $(x + 2y)$ • ₹ $(7x + 12xy + 3y)$ • ₹ $\left(\frac{4x + 3y}{3x + y}\right)$
Question 5	<p>A combination of constants and variables connected by either of the four fundamental operations is called</p> <ul style="list-style-type: none"> • like terms • unlike terms • algebraic expression • constant term
Question 6	<p>Avogadro's number is 6.02×10^{23}. If written in usual form, how many zeros would follow 2?</p> <ul style="list-style-type: none"> • 21 • 20 • 22 • 23
Question 7	<p>Cube of a negative number is always _____.</p> <ul style="list-style-type: none"> • 0 • 1 • positive • negative

Question 8	<p>The heights of trees in a park range from 5 feet to 38 feet tall. Which inequality would describe the height of the trees?</p> <ul style="list-style-type: none"> • $x < 5 + 38$ • $5 < x < 38$ • $5 > x > 38$ • $5 < 38$
Question 9	<p>For a number to be a perfect square, which of these should not be in its ones place?</p> <ul style="list-style-type: none"> • 1 • 9 • 6 • 8
Question 10	<p>Two equal sides of an isosceles triangle are $(4x + 1)$ units and $(3x + 7)$ units, respectively. If the third side is $(2x + 3)$ units, then what is its perimeter?</p> <ul style="list-style-type: none"> • 50 units • 55 units • 60 units • 65 units

- x -

Answers

Answer 1	7 hours
Answer 2	1
Answer 3	{1, 2, 3}
Answer 4	₹ (x + 2y)
Answer 5	algebraic expression
Answer 6	21
Answer 7	negative
Answer 8	$5 < x < 38$
Answer 9	8
Answer 10	65 units