



Algebraic Expressions, Linear Equations, and Perimeter & Area

Theme	Algebraic Expressions, Linear Equations, and Perimeter & Area										
Question 1	<p>Dylan made a secret rule to calculate a number. Vince must figure out what the secret rule is. Dylan gives Vince the table shown alongside to help him find the rule.</p> <table border="1"><thead><tr><th colspan="2">Rule</th></tr><tr><th>r</th><th>t</th></tr></thead><tbody><tr><td>5</td><td>7</td></tr><tr><td>8</td><td>13</td></tr><tr><td>3</td><td>3</td></tr></tbody></table> <p>Which equation shows the rule?</p> <ul style="list-style-type: none">• $t = 2r - 3$• $t = 3r - 8$• $t = r + 5$• $t = r + 2$	Rule		r	t	5	7	8	13	3	3
Rule											
r	t										
5	7										
8	13										
3	3										
Question 2	<p>The product of $9xy^2z$, $9x$, $9y$ and 0 is:</p> <ul style="list-style-type: none">• $729xy^2z$• $9x^2y^2z$• $9x^2y^3z$• 0										

Question 3	<p>Which of the following gives the value of x for the equation given below?</p> $4.2x = 60$ <ul style="list-style-type: none"> • Add 4.2 to each side of the equation. • Subtract 4.2 from each side of the equation. • Multiply each side of the equation by 4.2. • Divide each side of the equation by 4.2.
Question 4	<p>Power of variable in a simple linear equation is _____.</p> <ul style="list-style-type: none"> • 0 • 1 • 2 • 3
Question 5	<p>Which of these algebraic expressions represents 18 less than twice a number (m)?</p> <ul style="list-style-type: none"> • $18 - 2m$ • $2m - 18$ • $18 + 2m$ • $m - 2(18)$
Question 6	<p>What should be added to $x - y - z$ to get $x + y + z$?</p> <ul style="list-style-type: none"> • $-x - y - z$ • $2y + 2z$ • $2x - 2y - 2z$ • $-2y - 2z$

Question 7	<p>Mary wants new carpeting for her dining room floor. The dining room is 11.9 m by 11.1 m. How much carpeting material does she need to buy to cover her entire dining room?</p> <ul style="list-style-type: none"> • 23 sq. m • 30 sq. m • 100 sq. m • 132.09 sq. m
Question 8	<p>Adiba knitted a rectangular muffler that has an area of 24 square metres. If the width of the muffler is 200 cm, what is the perimeter?</p> <ul style="list-style-type: none"> • 22 m • 24 m • 26 m • 28 m
Question 9	<p>If the length and breadth of a rectangle are in the ratio 5 : 3 and its perimeter is 144 m, what is the area of the rectangle?</p> <ul style="list-style-type: none"> • 1115 m² • 1215 m² • 1315 m² • 1415 m²

Question 10 If the side of a square is doubled, its area becomes:

- double
- 3 times
- 4 times
- 8 times

- x -

Answers

Answer 1	$t = 2r - 3$
Answer 2	0
Answer 3	Divide each side of the equation by 4.2.
Answer 4	1
Answer 5	$2m - 18$
Answer 6	$2y + 2z$
Answer 7	132.09 sq. m
Answer 8	28 m
Answer 9	1215 m^2
Answer 10	4 times

- x -