




ALTIUS

Logical Reasoning and Quantitative Aptitude

WORKSHEET 2

Question 1	<p>Two numbers are in the ratio 7 : 9 and their difference is 18. What is the sum of the two numbers?</p> <ul style="list-style-type: none">• 63• 81• 124• 144
Question 2	<p>$2! = 2 \times 1$ and $3! = 3 \times 2 \times 1$. Joe wrote the expression '$10! - 9!$' on the board. Which of the following has the same value as this expression?</p> <ul style="list-style-type: none">• $1!$• 10• $9 \times 9!$• $10 \times 9!$

<p>Question 3</p>	<p>Seema has some buttons. If she arranges them in rows of either 2, 3, 4, 5 or 6, she has one button left over. If she arranges them in rows of 7, she has no buttons left over. What is the least possible number of buttons that Seema has?</p> <ul style="list-style-type: none"> • 161 • 231 • 301 • 371
<p>Question 4</p>	<p>Molly had a rope 3.6 m long. She cut a piece 1.7 m long from the rope. She cut the remaining rope into 5 equal pieces. She laid three of these equal pieces in the shape of a triangle. What is the perimeter of the triangle?</p> <ul style="list-style-type: none"> • 0.13 m • 0.38 m • 1.02 m • 1.14 m
<p>Question 5</p>	<p>Sanjay overlapped two rectangles to make a new shape as shown. Each rectangle was 4 cm by 10 cm. What is the area of the new shape?</p> <ul style="list-style-type: none"> • 80 cm² • 64 cm² • 48 cm² • 40 cm² <div style="text-align: right;">  </div>

Question 6	<p>In an isosceles triangle, the vertex angle is twice one of the base angles. What more can be said about the type of this triangle?</p> <ul style="list-style-type: none"> • Equiangular triangle • Obtuse-angled triangle • Right-angled triangle • Scalene triangle
Question 7	<p>If 8% of x is equal to 4% of y, then 20% of x is equal to:</p> <ul style="list-style-type: none"> • 10% of y • 16% of y • 40% of y • 80% of y
Question 8	<p>A 120 m long train running at a speed of 72 km/hr can pass a platform in 15 seconds. What is the length of the platform?</p> <ul style="list-style-type: none"> • 180 m • 300 m • 960 m • 1080 m

Question 9	<p>A cyclic parallelogram, having unequal adjacent sides, is necessarily a _____.</p> <ul style="list-style-type: none">• square• rhombus• rectangle• kite
Question 10	<p>If the sum of three consecutive integers is 20 more than the middle integer, then what is the smallest integer among these?</p> <ul style="list-style-type: none">• 13• 11• 9• 7

- x -

Answers

Answer 1	144
Answer 2	$9 \times 9!$
Answer 3	301
Answer 4	1.14 m
Answer 5	64 cm^2
Answer 6	Right-angled triangle
Answer 7	10% of y
Answer 8	180 m
Answer 9	rectangle
Answer 10	9