



ALTIUS

# Logical Reasoning and Quantitative Aptitude

WORKSHEET 2

Question 1	<p>If each side of a square is doubled, then by what percentage will its area increase?</p> <ul style="list-style-type: none"><li>• 100%</li><li>• 200%</li><li>• 300%</li><li>• 400%</li></ul>
Question 2	<p>If <math>x\%</math> of <math>y\%</math> of 80 is same as 25% of 900, then what is the value of <math>xy</math>?</p> <ul style="list-style-type: none"><li>• 30100</li><li>• 28125</li><li>• 32500</li><li>• 25986</li></ul>
Question 3	<p>A person in a train notices that he can count 21 telephone posts in one minute. If the posts are 50 m apart, then at what speed is the train travelling?</p> <ul style="list-style-type: none"><li>• 6 m/s</li><li>• 6 km/hr</li><li>• 60 km/hr</li><li>• 60 m/s</li></ul>

Question 4	<p>A horse is tied to one corner of a rectangular field of dimensions 40 m by 24 m, with a rope 14 m long. How much area of the field can be grazed by the horse?</p> <ul style="list-style-type: none"> <li>• 150 m<sup>2</sup></li> <li>• 154 m<sup>2</sup></li> <li>• 308 m<sup>2</sup></li> <li>• none of these</li> </ul>
Question 5	<p>From a circular sheet of paper having radius of 20 cm, four circles of radius 5 cm each are cut out. What is the ratio of the area of the remaining portion to the area of the 4 circles?</p> <ul style="list-style-type: none"> <li>• 3 : 1</li> <li>• 1 : 3</li> <li>• 4 : 3</li> <li>• 3 : 2</li> </ul>
Question 6	<p>Sam got married 8 years ago. His present age is times his age at the time of his marriage. Sam's brother was 10 years younger than Sam at the time of Sam's marriage. What is the present age of Sam's brother?</p> <ul style="list-style-type: none"> <li>• 38 years</li> <li>• 40 years</li> <li>• 46 years</li> <li>• 48 years</li> </ul>

Question 7	<p>How many square numbers less than 1000000 are divisible by 6?</p> <ul style="list-style-type: none"><li>• 166666</li><li>• 27777</li><li>• 166</li><li>• 27</li></ul>
Question 8	<p>Ravi sold an article for ₹ 891, thereby gaining one-tenth of its cost price. What is the cost price of the article?</p> <ul style="list-style-type: none"><li>• ₹ 710</li><li>• ₹ 750</li><li>• ₹ 810</li><li>• ₹ 850</li></ul>
Question 9	<p>If two numbers are respectively 20% and 50% of a third number, then what percentage is the first number of the second number?</p> <ul style="list-style-type: none"><li>• 10%</li><li>• 20%</li><li>• 30%</li><li>• 40%</li></ul>

Question 10

The students in three classes are in the ratio 2 : 3 : 5. If 40 students are increased in each class, the ratio becomes 4 : 5 : 7. What was the total number of students in the class initially?

- 100
- 200
- 300
- 400

- x -

## Answers

Answer 1	300%
Answer 2	28125
Answer 3	60 km/hr
Answer 4	154 m <sup>2</sup>
Answer 5	3 : 1
Answer 6	38 years
Answer 7	166
Answer 8	₹ 810
Answer 9	40%
Answer 10	200