

# Centum Preparation 100 Days plan class 12 Maths

| Q.N<br>o. | DAY - 77  |
|-----------|---|
| 480       | <p><b>Example 12.6</b></p> <p>Verify (i) closure property (ii) commutative property, and (iii) associative property of the following operation on the given set. <math>(a * b) = a^b; \forall a, b \in \mathbb{N}</math> (exponentiation property)</p>  |
| 481       | <p><b>Example 12.7</b></p> <p>Verify (i) closure property, (ii) commutative property, (iii) associative property, (iv) existence of identity, and (v) existence of inverse for following operation on the given set. <math>m * n = m + n - mn; m, n \in \mathbb{Z}</math></p>   |
| 482       | <p><b>Example 12.8</b></p> <p>Let <math>A = \begin{bmatrix} 0 &amp; 1 \\ 1 &amp; 1 \end{bmatrix}</math>, <math>B = \begin{bmatrix} 1 &amp; 1 \\ 0 &amp; 1 \end{bmatrix}</math> be any two boolean matrices of the same type. Find <math>A \vee B</math> and <math>A \wedge B</math>.</p>  |
| 483       | <p><b>Example 12.9</b></p> <p>Verify (i) closure property, (ii) commutative property, (iii) associative property, (iv) existence of identity, and (v) existence of inverse for the operation <math>+_5</math> on <math>\mathbb{Z}_5</math> using table corresponding to addition modulo 5.</p>  |
| 484       | <p><b>Example 12.10</b></p> <p>Verify (i) closure property, (ii) commutative property, (iii) associative property, (iv) existence of identity, and (v) existence of inverse for the operation <math>\times_{11}</math> on a subset <math>A = \{1, 3, 4, 5, 9\}</math> of the set of remainders <math>\{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}</math>.</p> |