

Operations on Whole Numbers Ex 4.5 Q1

Answer:

(i) 10th square number: A square number can easily be remembered by the following rule:

nth square number = n²

 \therefore 10th square number = 10² = 100

(ii) 6th triangular number: A triangular number can easily be remembered by the following rule:

 n^{th} triangular number = $\frac{n \times (n+1)}{2}$

 $\therefore 6^{th} \text{ triangular number} = \frac{6 \times (6+1)}{2} = 21$

Operations on Whole Numbers Ex 4.5 Q2

Answer:

(i) Yes, a rectangular number can also be a square number; for example, 16 is a square number and also a rectangular number.



(ii) Yes, there exists only one triangular number that is both a triangular number and a square number, and that number is 1.

Operations on Whole Numbers Ex 4.5 Q3

Answer:

$$1 \times 5 = 5$$
 $(5 - 1 = 4)$

$$2 \times 6 = 12 (6 - 2 = 4)$$

$$3 \times 7 = 21 (7 - 3 = 4)$$

$$4 \times 8 = 32 (8 - 4 = 4)$$

Operations on Whole Numbers Ex 4.5 Q4

Answer:

 $9 \times 9 + 7 = 88$

 $98 \times 9 + 6 = 888$

 $987 \times 9 + 5 = 8888$

 $9876 \times 9 + 4 = 888888$

 $98765 \times 9 + 3 = 8888888$

 $987654 \times 9 + 2 = 88888888$

******* END *******