

6th – Whole Numbers II



Additive Identity: Zero is called the additive identity of a whole number because it maintains the identity of the number during the operation of addition. For ex:-
 $7+0=0+7=7$ or $a+0=0+a=a$.

The distributive property states that multiplying a sum by a number gives the same result as multiplying each addend by the number and then adding the products together.

$$4 \times (2 + 3) = 4 \times 2 + 4 \times 3$$

Q1: Solve the following as fast as you can use the properties of addition and multiplication.

- (a) $365+94+35$ (b) $896+423+104$ (c) $379 \times 25 \times 4$ (d) $89 \times 125 \times 8$

Q2: Show that

(a) $(693+432)+412=693+(432+412)$ (c) $(63 \times 5) \times 20=63 \times (5 \times 20)$

(b) $(85 \times 30) \times 4=85 \times (30 \times 4)$

Q3: Find the following products:

- (a) $4 \times 2518 \times 25$ (b) $5 \times 4231 \times 60$ (c) $50 \times 8 \times 4 \times 250$ (d) $625 \times 1234 \times 8$

Q4: Solve the following using the associative property.

- a) $367+243+57$ b) $819+217+87$ c) $47+313+53$ d) $918+712+82$

Q5: Name the property.

a) $19+63=63+19$ b) $16+95=95+16$ c) $(20+3)+16=20+(3+16)$

d) $37+(9+7)=(37+9)+7$

Q6: Solve the following as fast as you can using the properties of addition and multiplication.

- a) $365+94+35$ b) $896+432+104$ c) $379 \times 25 \times 4$ d) $89 \times 125 \times 8$

Q7: Division by zero:

- a) $2 \div 0$ b) $7 \div 0$ c) $100 \div 0$ d) $0 \div 155$ e) $123 \div 0$

Q8: Solve using the distributive property:

- (a) 8×107 (b) 18×95 (c) 24×102
(d) $96 \times 73 - 94 \times 73$ (e) $697 \times 8 - 697 \times 2$ (f) $23 \times 9 + 23 \times 1$

Q9: Solve the following:

1. $69 + 18 + 32$ (using associative property)
2. $76 \times 11 - 65 \times 11$ (using distributive property)

Q10: Mark True or False:

1. $(100 + 10) + 5 = 100 + (10 + 5)$ _____
2. $20 \times 30 = 30 \times 20$ _____
3. $480 + 0 = 0 + 480$ _____
4. $7(6 - 3) = 7 \times 6 - 7 \times 3$ _____

Q11: Multiply the following:

- a) 163×97 b) 203×99 c) 166×102 d) 155×101 e) 99×166

Q12: Solve using distributive property:

- a) $566 \times 43 + 566 \times 55$ b) $1562 \times 62 + 1562 \times 38$
c) $85 \times 15 + 16 \times 15$ d) $21 \times 77 - 77 \times 11$
e) $750 \times 17 + 750 \times 38$ f) $650 \times 23 + 650 \times 17 + 650 \times 11$
g) $688 \times 10 \times 437 - 6880 \times 337$ h) $95 \times 13 + 13 \times 13$
i) 12×35 j) $126 \times 55 + 126 \times 44$
k) $81265 \times 166 - 81265 \times 66$ l) $3845 \times 5 \times 782 + 769 \times 25 \times 218$

Question using distributive property

1. In a bouquet, there are 7 roses 8 gladioli. In 9 bouquets, how many flowers are there?



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2. In a class there are 23 boys and 18 girls. How many students are there in six such classes?
3. In a plate there were 9 sweets each. 3 of the sweets in each plate were rosogullas and the remaining were burfees. How many burfees are there in 7 plates? Write the mathematical statements.
4. Give an example where distributive property over subtraction in whole numbers will not work. Also give an example where this property will work.
5. There are 7 plates. Six biscuits are placed on each plate. If 4 biscuits are taken away from each plate, how many biscuits are left on the plates? Write the mathematical statements.
6. Raju buys 12 keyboards and 12 printers. If the cost of one keyboard and one printer is Rs 6100 and Rs 7665 respectively. Find the total cost incurred by Raju using distributive property.
7. In a college, the monthly fess of one child is Rs 498. If there are 2988 students in a college, find the total fee collected in one month using distributive property.

