EXERCISE 1.8

1. Write the expression for each of the following statements using brackets:
(i) Four multiplied by the sum of 13 and 7.
(ii) Eight multiplied by the difference of four from nine.
(iii) Divide the difference of twenty eight and seven by 3.
(iv) The sum of 3 and 7 is multiplied by the difference of twelve and eight.
Solution:

(i) The expression for Four multiplied by the sum of 13 and 7 is $4 \times (13 + 7)$.

(ii) Eight multiplied by the difference of four from nine is $8 \times (9 - 4)$.

(iii) Divide the difference of twenty eight and seven by 3 is $(28 - 7) \div 3$.

(iv) The sum of 3 and 7 is multiplied by the difference of twelve and eight

2. Simplify each of the following:
(i) 124 – (12 – 2) × 9
(ii) (13 + 7) × (9 – 4) – 18
(iii) 210 – (14 – 4) × (18 + 2) – 10
Solution:

(i) $124 - (12 - 2) \times 9$ on further simplification we obtain
$124 - (12 - 2) \times 9$
$= 124 - 10 \times 9$
$= 124 - 90$
$= 34$

(ii) $(13 + 7) \times (9 - 4) - 18$ on further simplification we obtain
$(13 + 7) \times (9 - 4) - 18$
$= 20 \times 5 - 18$
$= 100 - 18$
$= 92$

(iii) $210 - (14 - 4) \times (18 + 2) - 10$ on further simplification we obtain
$210 - (14 - 4) \times (18 + 2) - 10$
$= 210 - 10 \times 20 - 10$
$= 210 - 200 - 10$
$= 0$