ODM EDUCATIONAL GROUP
Changing your Tomorrow

SUBSTITUTION

SUBJECT : MATHEMATICS
CHAPTER NUMBER:20
CHAPTER NAME :SUBSTITUTION
SUBTOPIC : Inserting Brackets
PERIOD NO: 3

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Learning outcomes

- Students will be able to insert brackets .
- Students will develop application skill.

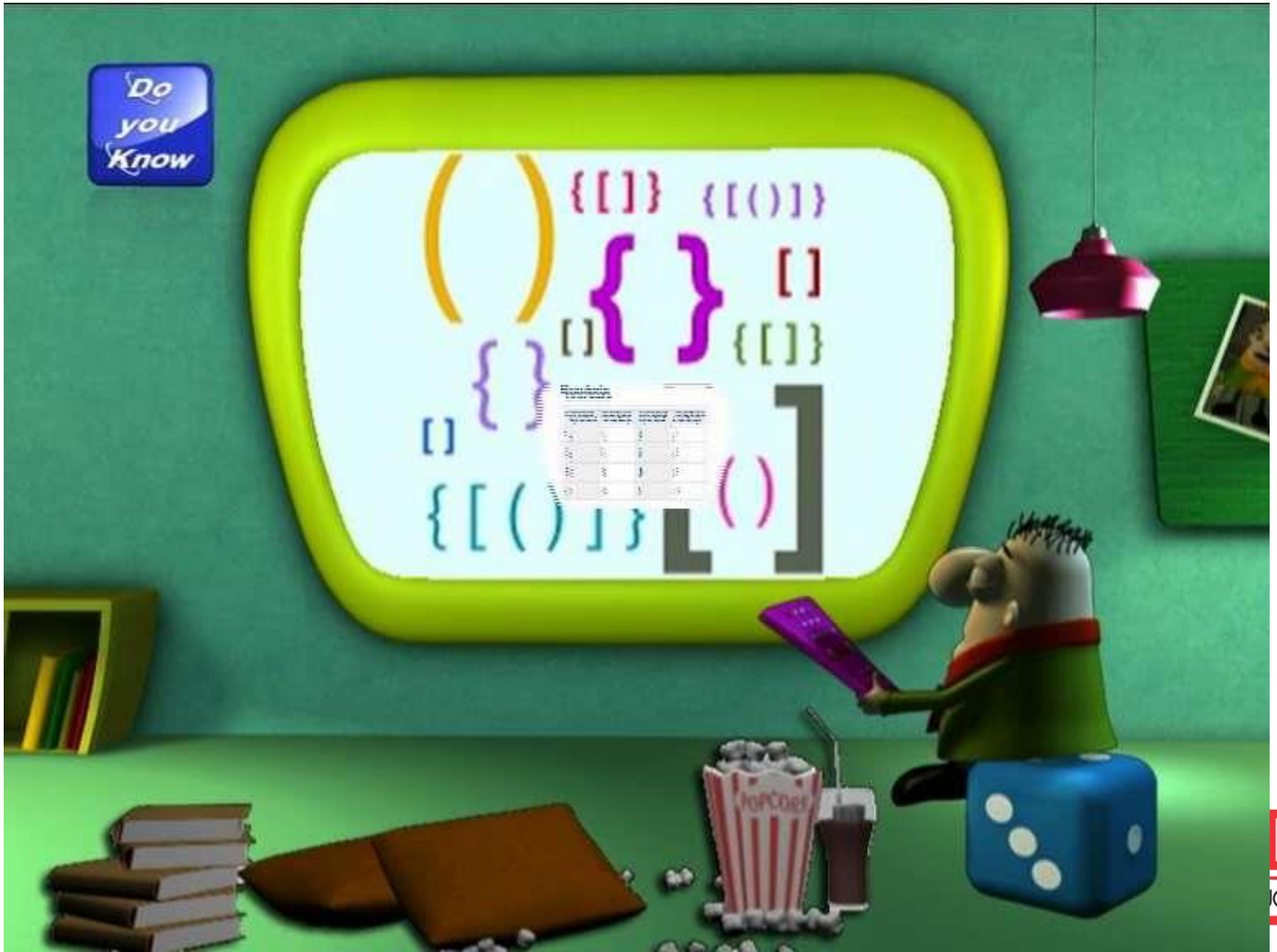
PREVIOUS KNOWLEDGE TEST

1. State true and false:

(i) The value of x + 5 = 6, when x = 1

(ii) The value of 2x – 3 = 1, when x = 0

(iii) (2x – 4) / (x + 1) = -1, when x = 1


Do you Know
POPCORN

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(i) $x - 2y = -(2y - x)$

(ii) $m + n - p = -(p - m - n)$

(iii) $a + 4b - 4c = a + (4b - 4c)$

(iv) $a - 3b + 5c = a - (3b - 5c)$

(v) $x^2 - y^2 + z^2 = x^2 - (y^2 - z^2)$

(vi) $m^2 + x^2 - p^2 = -(p^2 - m^2 - x^2)$

(vii) $2x - y + 2z = 2z - (y - 2x)$

(viii) $ab + 2bc - 3ac = 2bc - (3ac - ab)$

Evaluation Question EX-20 C

1. Fill in the blanks:

(i) 2a + b – c = 2a + (……) **(ii) 3x – z + y = 3x – (……)**

(iii) 6p – 5x + q = 6p – (……) **(iv) a + b – c + d = a + (……)**

(v) 5a + 4b + 4x – 2c = 4x – (……)

Solution:(i) 2a + b – c = 2a + **(b – c)**

(ii) 3x – z + y = 3x – **(z – y)**

(iii) 6p – 5x + q = 6p – **(5x – q)**

(iv) a + b – c + d = a + **(b – c + d)**

(v) 5a + 4b + 4x – 2c = 4x – **(2c – 5a – 4b)**

Evaluation Question

2. Insert the bracket as indicated:

(i) $x - 2y = -$ (……) **(ii) $m + n - p = -$ (……..)**

(iii) $a + 4b - 4c = a +$ (……..) **(iv) $a - 3b + 5c = a -$ (……..)**

(v) $x^2 - y^2 + z^2 = x^2 -$ (……)

Solution:(i) $x - 2y = -$ **$(2y - x)$**

(ii) $m + n - p = -$ **$(p - m - n)$**

(iii) $a + 4b - 4c = a +$ **$(4b - 4c)$**

(iv) $a - 3b + 5c = a -$ **$(3b - 5c)$**

(v) $x^2 - y^2 + z^2 = x^2 -$ **$(y^2 - z^2)$**

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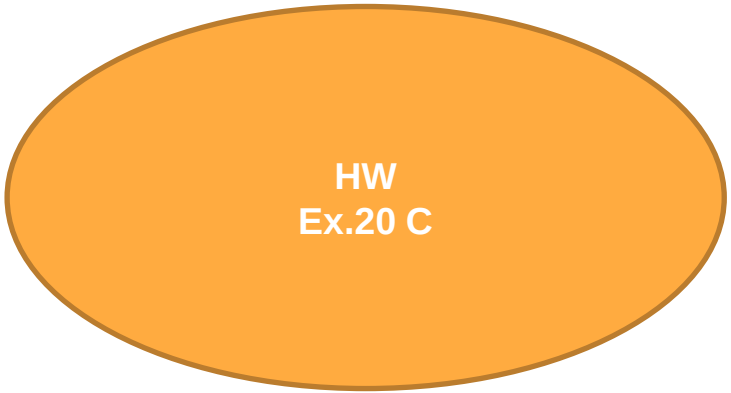
Additional Homework

1. 6a – (- 5a – 8b) + (3a + b)
2. (p – 2q) – (3q – r)
3. 9a (2b – 3a + 7c)



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THANKING YOU

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