

Substituting

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You will be given a value for the variable

Eg $x=1$ or $y=-2$

Method

- 1) you replace the variable in the expression with the given value of the variable
- 2) When you substitute a value into an expression you USE BRACKETS (multiply)

Eg 1) If $x=2$ and $y=3$, Find the value of the following

1) $x+2$ $(2)+2$ $=4$	2) $3x+2y$ $3(2)+2(3)$ $6+6$ $=12$	3) $5xy$ $5(2)(3)$ $=30$
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HW Pg 173 Q2.

Q2) $x=5$

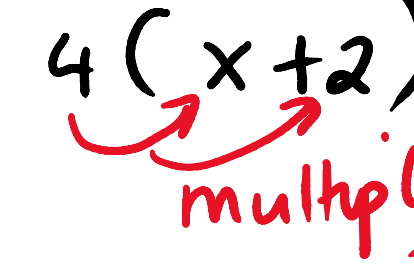

i) $x+3$ $(5)+3=8$	ii) $5x$ $5(5)=25$	iii) $4x+5$ $4(5)+5$ $20+5$ $=25$
iv) $3x-7$ $3(5)-7$ $15-7$ $=8$	v) $12-x$ $12-(5)$ $=7$	vi) $15-2x$ $15-2(5)$ $15-10$ $=5$
vii) $-3x+20$ $-3(5)+20$ $-15+20$ $=5$	viii) $9-3x$ $9-3(5)$ $9-15$ $=-6$	

Pg 173 Q3 $a=4$, $b=2$

i) $a-b$ $(4)-(2)=2$	iv) ab $(4)(2)=8$
ii) $6a+3b$ $6(4)+3(2)$ $24+6=30$	v) $6ab-2a$ $6(4)(2)-2(4)$ $48-8=40$
iii) $5a-2b$ $5(4)-2(2)$ $20-4=16$	vi) $6a-2ab$ $6(4)-2(4)(2)$ $24-16=8$
vii) $3ab+6b$ $3(4)(2)+6(2)$ $24+12=36$	viii) $2a-6+4ab$ $2(4)-6+4(4)(2)$ $8-6+32$ $=34$

Removing Brackets

Method: Multiply the number outside the bracket by everything inside the bracket.

Eg 1) $4(x+2)$  $=4x+8$	Eg 2) $3(a+6)$  $=3a+18$
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C/W Pg 176 Q4 → 9

4) $3(x+y)$ $=3x+3y$	5) $5(2x+y)$ $=10x+5y$	6) $4(2x+3y)$ $=8x+12y$
7) $6(2x-y)$ $12x-6y$	8) $3(x+2y+1)$ $3x+6y+3$	9) $6(2a+b+3)$ $12a+6b+18$

$$10) 6(a+4) + 2(2a+3)$$

$$\underline{6a} + \underline{24} + \underline{4a} + \underline{6}$$

$$= 10a + 30$$

Classwork - Homework \rightarrow 7/3/19

Pg 173 Q 4, 5, 6 } Has to be done.

Pg 176 Q 12 \rightarrow 23 }

Extra Work if finished Pg 174 Q 7 \rightarrow 12.