

16.  $3(2x + 1) = 2x + 11$     17.  $2(2x + 5) = 5x + 5$     18.  $4(2x - 3) = 2(3x - 5)$   
 19.  $3(2x - 6) = 2(2x + 1)$     20.  $3(5x - 2) = 4(3x + 6)$     21.  $6(1 + 2x) = 5(3x - 1) - 4$

<p>16 -2x, -3</p>	$3(2x + 1) = 2x + 11$ $6x + 3 = 2x + 11$ $6x - 2x = 11 - 3$ $\frac{4x}{4} = \frac{8}{4}$ $x = 2 \quad \checkmark$
<p>17 -5x, -10</p>	$2(2x + 5) = 5x + 5$ $4x + 10 = 5x + 5$ $4x - 5x = 5 - 10$ $-x = -5$ $x = 5 \quad \checkmark$
<p>18. +12, -6x</p>	$4(2x - 3) = 2(3x - 5)$ $8x - 12 = 6x - 10$ $8x - 6x = -10 + 12$ $\frac{2x}{2} = \frac{2}{2}$ $x = 1 \quad \checkmark$

11. The Universal Social Charge (USC) rates are given in the table below:

Per year	Rate of USC	Per week
Up to €10 036	2%	Up to €193
€10 036.01 to €16 016	4%	€193.01 to €308
In excess of €16 016	7%	In excess of €308

**Note:** Disregard the 1 cent for calculation purposes.

- (i) Aidan has an annual salary of €57 000.  
 Calculate his USC for the year.

3 rates apply

$$57\,000 = 10\,036 + 5\,980 + 40\,984$$

	Rate	€ at this rate	USC €
1	2%	10 036	200.72
2	4%	5 980	239.20
3	7%	40 984	2 868.88
Total usc			3,308.80