Arellano Granados Angel Mariano 4/5/27

Tarea 9

1. $(x+1)^2 = 2x^2 + x - 19$ $x^2 + 2x + 1 = 2x^2 + x - 19$
$x^2 - x - 20$ $(x-5)(x+4)$ $x = 5, -4$

2. $\left(16 - \frac{35}{v} = v + 28\right) v$ $16v - 35 = v^2 + 28v$
$v^2 + 12v + 35$ $(v+7)(v+5)$
$v = -7, -5$

3. $\left(\frac{x}{x-16} = \frac{-2}{x-6}\right)(x-16)(x-6)$ $x^2 - 6x = -2x + 32$
$x^2 - 4x - 32$
$(x-8)(x+4)$
$x = 8, -4$

4. $\left(\frac{4w}{w-5} = -\frac{72}{w^2 - 9w + 20}\right)(w-5)(w-4)$ $4w^2 - 16w = -72$
$4w^2 - 16w + 72 = 0$
$(2w-6)(2w-2)$
$w = 3, 1$

5. $y^2 + 18y + 81$
cuadrado perfecto

6. $2x^2 - 7x + 1 = 0$
$x = \frac{7 \pm \sqrt{41}}{4}$

7. $\left(4 - \frac{3}{v+1} = -\frac{3}{v+2}\right)(v+1)(v+2)$
$4v^2 + 12v + 8 - 3v - 6 = -3v - 3$ $4v^2 + 12v + 5$
$(2v+5)(2v+1)$ $v = -5/2, -1/2$

8. $\sqrt{x^2} = \pm\sqrt{36}$ $x = 6, -6$

9. $(\sqrt{v+3} = 9)^2$ $v + 3 = 81 - 3$ $v = 78$

10. $5v^2 - 20v = 0$
$5v(v-4)$ $v = 0, 4$