18. $\left(\sqrt{2t-7}\right)^2 = \left(\sqrt{t+2}\right)^2$

$2t - 7 = t + 2$

$2t = t + 9$

$\boxed{t = 9}$

$\sqrt{2(9)-7} = \sqrt{9+2}$

$\checkmark \ \sqrt{11} = \sqrt{11}$

27. $(3x-2)^{\frac{1}{5}} + 6 = 5$

$\sqrt[5]{3x-2} + 6 = 5$

$\left(\sqrt[5]{3x-2}\right)^5 = \left(-1\right)^5$

$3x - 2 = -1$

$3x = 1$

$\boxed{x = \frac{1}{3}}$

$\sqrt[5]{3(\frac{1}{3})-2} + 6 = 5$

$\sqrt[5]{-1} + 6 =$

$-1 + 6 =$

$\checkmark \ 5 = 5$

21. $\left(\sqrt{b+1}\right)^2 = \left(\sqrt{b+6}-1\right)^2$

$\left(\sqrt{b+6}-1\right)\left(\sqrt{b+6}-1\right)$

$b+1 = b+6 - \sqrt{b+6} - \sqrt{b+6} + 1$

$b+1 = b+7 - 2\sqrt{b+6}$
$-b -7 \quad -b -7$

$-6 = -2\sqrt{b+6}$

$(3)^2 = \left(\sqrt{b+6}\right)^2$

$9 = b + 6$

$\boxed{3 = b}$

$\sqrt{3+1} = \sqrt{3+6} - 1$
$\sqrt{4} = \sqrt{9} - 1$
$2 = 3 - 1$

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25. $(6n-5)^{\frac{1}{3}} + 3 = -2$

$\sqrt[3]{6n-5} + 3 = -2$

$\left(\sqrt[3]{6n-5}\right)^3 = (-5)^3$

$6n - 5 = -125$

$6n = -120$

$\boxed{n = -20}$

$\sqrt[3]{6(-20)-5} + 3 = -2$

$\sqrt[3]{-125} + 3 =$

$-5 + 3 =$

$\checkmark \quad -2 = -2$