Algebra 2 4-18-13 CLASS NOTES

(51) $0 = -5 + \left(\frac{V}{5}\right)^{\frac{1}{2}}$

$\left[5\right]^{\frac{2}{1}} = \left[\left(\frac{V}{5}\right)^{\frac{1}{2}}\right]^{\frac{2}{1}}$

$25 = \frac{V}{5}$

$\boxed{125 = V}$

CK

$0 \stackrel{?}{=} -5 + \left(\frac{125}{5}\right)^{\frac{1}{2}}$

$0 \stackrel{?}{=} -5 + (25)^{\frac{1}{2}}$ ✓

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(59) $(8x)^{\frac{3}{2}} + 5 = 517$

$\left[(8x)^{\frac{3}{2}}\right]^{\frac{2}{3}} = 512^{\frac{2}{3}}$

$8x = \left(\sqrt[3]{512}\right)^2$

$8x = (8)^2$

$8x = 64$

$\boxed{x = 8}$

CK $(8 \cdot (8))^{\frac{3}{2}} + 5 \stackrel{?}{=} 517$

$(64)^{\frac{3}{2}}$

$512 + 5 = 517$ ✓

WS

(26) $\sqrt{p+10} = \sqrt{-4-p}$

$p+10 = -4-p$

$2p = -14$

$\boxed{\therefore p = -7}$

Ck $\sqrt{-7+10} \stackrel{?}{=} \sqrt{-4-(-7)}$

$\sqrt{3} = \sqrt{3}$ ✓

(30) $-3+\sqrt{-3-3x}=\sqrt{-4-x}$

$(-3+\sqrt{-3-3x})(-3+\sqrt{-3-3x})=-4-x$

(9) $-3\sqrt{-3-3x}-3\sqrt{-3-3x}+(-3)(-3x)=-4-x$

$=2x-10$

$\left[-6\sqrt{-3-3x}\right]^2=[2x-10]^2$

$36[-3-3x]=4x^2-40x+100$

$-108-108x=4x^2-40x+100$

$4x^2+68x+208$

$0=4(x^2+17x+52)$

Sum = 17

Prod = 52

$+4\ +13$

$0=4(x+4)(x+13)$

$x=-4,-13$

CK

$x=-4,$