March 4, 2015

$3 + \boxed{3 \cdot \frac{1}{3}} - 3 \div 3 + 3$

$3 + 1 \boxed{- 3 \div 3} + 3$

$\boxed{3 + 1} - 1 + 3$

$\boxed{4 - 1} + 3$

$\boxed{3 + 3}$

$\boxed{6}$

Mar 4-10:59 AM

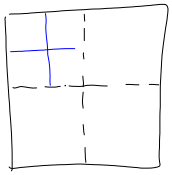
$$\frac{\frac{2}{7} - \frac{5}{3}}{\frac{5}{6} + \frac{1}{4}} = \frac{\frac{6 - 35}{21}}{\frac{10 + 3}{12}}$$

$$= \frac{-\frac{29}{21}}{\frac{13}{12}} \quad \begin{matrix} K \\ C \\ F \end{matrix}$$

$$= -\frac{29}{\cancel{21}_{7}} \cdot \frac{\cancel{12}^{4}}{13}$$

$$= -\frac{116}{91}$$

Mar 4-11:14 AM



Mar 4-11:24 AM

$f(x) = \sqrt{x}$ Parent

$D: [0, \infty)$

$f(-4) = \sqrt{-4}$

$(\ ?\ )^2 = -4 \notin \mathbb{R}$

$(-2)^2 = (-2)(-2) = 4$

x	$f(x)$
0	0
1	1
4	2
9	3
-4	Not a Real Number
-1	"

Mar 4-11:26 AM

$\sqrt{25} = 5$; $(5)^2 = 5 \cdot 5 = 25$ ✓

$-\sqrt{25} = (-1) \cdot \sqrt{25} = -1 \cdot 5 = -5$

$(5)^2 = 25$

Mar 4-11:31 AM

$g(x) = \boxed{\sqrt{x}} \boxed{-5}$

$\sqrt{x}$: Parent

-5: Vertical Shift down 5 units

x	$g(x)$
0	-5
1	-4
4	-3
9	-2

Mar 4-11:35 AM

$f(x) = \sqrt{x} + k$

Parent

① If $k > 0$, $\sqrt{x}$ shifts up k units.

② If $k < 0$, $\sqrt{x}$ shifts down k units.

Mar 4-11:40 AM

$h(x) = \sqrt{x-3} + 0$

Radicand

$x - 3 \geq 0$

$+3 \quad +3$

$x \geq 3$

Domain: $[3, \infty)$

x	$h(x)$

Mar 4-11:45 AM