Literal

#15) $\frac{a}{1}\left[z = b + \frac{m}{a}\right]$; for a ("a fractions")

LCD

$az = ab + m$ Dist (LCD)

$az - ab = m$ A.S.

$a(z - b) = m$ Dist

$\frac{a(z-b)}{(z-b)} = \frac{m}{(z-b)}$

$a = \frac{m}{z-b}$ M.D.

* Task: Clear fractions when they are in equation by distributing an LCD that clears all denominators.

Oct 2-9:50 AM

Two-Step

#1) $\frac{4}{1}\left(6 = \frac{a}{4} + 2\right)$; for a

$24 = a + 8$ Dist

$16 = a$ A.S.

Ck

$6 = \frac{16}{4} + 2$

$6 = 4 + 2$

$6 = 6$ ✓

Oct 2-10:14 AM

#11) $4\left(-2 = 2 + \frac{v}{4}\right)$

$-8 = 8 + v$ Dist

$-16 = v$ ✓ A.S.

Ck

$-2 = 2 + \frac{-16}{4}$

$= 2 + -4$

$-2 = -2$ ✓

Oct 2-10:17 AM

Radicals: Square Root Radicals

$\sqrt[2]{a^1} = a^{\frac{1}{2}}$

Index, Radicand, Base

Oct 2-10:20 AM

#1) $\left(\sqrt{x}\right)^2 = (10)^2$

$x = 100$

* Task: is to undo the radical.
• By squaring it.

Ck

$\sqrt{100} = 10$

$(?)^2 = 100$ $10 = 10$ ✓

$(10)^2 = 100$

Oct 2-10:24 AM

#6) $(5)^2 = \left(\sqrt{x+3}\right)^2$ (Radicand)

$25 = x + 3$

$22 = x$ ✓

Ck

$5 = \sqrt{22+3}$

$= \sqrt{25}$

$5 = 5$ ✓

Oct 2-10:28 AM

#2) $(10)^2 = \left(\sqrt{\frac{m}{10}}\right)^2$

$10\left(100 = \frac{m}{10}\right)$

$1000 = m$

Ck

$10 = \sqrt{\frac{1000}{10}}$

$= \sqrt{100}$

$10 = 10$ ✓

Oct 2-10:33 AM

#9) $-8 + \sqrt{5a-5} = -3$

needs to be isolated

$\left(\sqrt{5a-5}\right)^2 = (5)^2$ A. D.

$5a - 5 = 25$

$\frac{5a}{5} = \frac{30}{5}$ A. D.

$a = 6$ M. D.

Ck

$-8 + \sqrt{5(6)-5} = -3$

$-8 + \sqrt{30-5}$

$-8 + \sqrt{25}$

$-8 + 5$

$-3 = -3$ ✓

Oct 2-10:36 AM

#12) $\frac{-10\sqrt{v-10}}{-10} = \frac{-60}{-10}$

$\left(\sqrt{v-10}\right)^2 = (6)^2$ M. D.

$v - 10 = 36$

$v = 46$

Ck

$-10\sqrt{46-10} = -60$

$-10\sqrt{36}$

$-10 \cdot 6$

$-60 = -60$ ✓

Oct 2-10:43 AM