

1. $10t + u = 4(u + t)$

$6t - 3u = 0$

$2t = u$ 48

2. $[2 * (8 \# 12)] \# [(3 * 2) \# 5]$

$[2 * -4] \# [6 \# 5]$

$-8 \# 1 =$ -9

3. $\frac{1}{1} + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{6} + \frac{1}{8} + \frac{1}{12} + \frac{1}{24} = \frac{60}{24} =$ $\frac{5}{2}$ OR $2\frac{1}{2}$

-224695

4. $1 + 8 + 64 + 512 + 4096 + ~~26864~~ - 244912 =$ -253367

5. $\frac{a + 13b}{3a - b} = 3$

$a + 13b = 9a - 3b$

$16b = 8a$

$2 = \frac{a}{b}$

$\frac{a^3}{b^3} =$ 8

$37449 - 262144$

6. $-3x - 9 < 2$
 $x > -1\frac{1}{3}$

$n - 5 < x \leq 3$ $\{-3, -2, -1, 0, 1, 2, 3\}$

7

7. $.25n + .10(n + 15) + .05(n + 25) = 7.95$

$n = 13$

$13 + 28 + 38 =$ 79

8. $n(n + 2) + (n + n + 2) = 119$

$n^2 + 4n - 117 = 0$

$n = 9$ OR -13 Not positive

9, 11

9. $\frac{5n + 10}{2n + 10} = \frac{5}{3}$

$5n = 20$

$2n = 8$

160

$n = 4$ \rightarrow

10. $x(\sqrt{x^3}) = \frac{x^x}{x}$

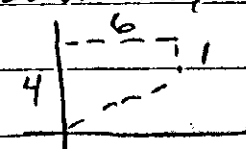
$x^2(x^{3/2}) = x^x$

$x^{7/2} = x^x$

$x =$ $\frac{7}{2}$ and 1

11. Solve only for c and d. $c = \frac{13}{14}$, $d = \frac{13}{14}$ $ab^0 =$ 1

12. $A = \frac{1}{2}(6)(4 + 1) =$ 15



13. $\sqrt{x + 6} + x = 14$

$x + 6 = (14 - x)^2$

$0 = x^2 - 29x + 190$

extraneous

$x = 19$ OR 10

10

14. Difference of 2 squares

4,000,000,000,000

15. $\frac{6 + 3n + \frac{1}{4} + \frac{1}{8}}{4} = n$

$n =$ $\frac{57}{8}$