Why Do Girls Like Guys Who Wear Shirts With Eight Buttons?

Solve each equation below and find your solution at the bottom of the page.
Write the letter of that equation above the solution.

(E) $4(5n - 7) = 10n + 2$ $n = 3$

(N) $9(x + 3) = 4x - 3$ $x = -6$

(A) $2(12 - 8x) = x - 11x$ $x = 4$

(H) $3t + 8(2t - 6) = 2 + 14t$ $t = 10$

(E) $2v + 18 = 16 - 4(v + 7)$ $v = -5$

(I) $4x - (9 - 3x) = 8x - 1$ $x = -8$

(T) $12(3 + y) = 5(2y + 8)$ $y = 2$

(A) $-7(1 - 4m) = 13(2m - 3)$ $m = -16$

(Y) $9(11 - k) = 3(3k - 9)$ $k = 7$

(S) $4x + 5(7x - 3) = 9(x - 5)$ $x = -1$

(T) $2(6d + 3) = 18 - 3(16 - 3d)$ $d = -12$

(F) $8(4u - 1) - 12u = 11(2u - 6)$ $u = 29$

(C) $-5 - (15y - 1) = 2(7y - 16) - y$ $y = 1$

T	H	E	Y		F	A	S	C	I	N	A	T	E
2	10	3	7	9	29	4	-1	1	-8	-6	-16	-12	-5

A–48   OBJECTIVE 4–o: To solve equations containing parentheses and having the variable in both sides.

(A) $-7(1-4m) = 13(2m-3)$

$-7 + 28m = 26m - 39$
$\quad -26m \qquad -26m$
_____

$-7 + 2m = -39$
$+7 \qquad\qquad +7$
_____

$\dfrac{2m}{2} = -\dfrac{32}{2}$

$\boxed{m = -16}$

(Y) $9(11 - K) = 3(3K - 9)$

$$99 - 9K = 9K - 27$$
$$\underline{-9K \qquad -9K}$$

$$99 - 18K = -27$$
$$\underline{-99 \qquad\qquad -99}$$

$$\frac{-18K}{-18} = \frac{-126}{-18}$$

$$\boxed{K = 7}$$

© $-5 - 1(15y - 1) = 2(7y - 16) - y$

$-5 - 15y + 1 = 14y - 32 - y$

$-4 - 15y = 13y - 32$
$ + 15y \quad\quad + 15y$
_____

$-4 = 28y - 32$
$+32 \quad\quad\quad +32$
_____

$\dfrac{28}{28} = \dfrac{28y}{28}$

$1 = y$

$\boxed{y = 1}$

(T) $2(6d + 3) = 18 - 3(16 - 3d)$

$12d + 6 = 18 - 48 + 9d$

$12d + 6 = -30 + 9d$
$-9d \qquad\qquad -9d$
_____

$3d + 6 = -30$
$\quad -6 \qquad -6$
_____

$\dfrac{3d}{3} = -\dfrac{36}{3}$

$\boxed{d = -12}$

(A) $2(12 - 8x) = x - 11x$

$24 - 16x = \underline{x} - \underline{11x}$

$24 - 16x = -10x$
$ + 16x + 16x$
_____

$\dfrac{24}{6} = \dfrac{6x}{6}$

$4 = x$

$\boxed{x = 4}$

Ⓢ $4x + 5(7x - 3) = 9(x - 5)$

$4x + 35x - 15 = 9x - 45$

$39x - 15 = 9x - 45$
$ + 15 + 15$

$39x = 9x - 30$
$-9x -9x$

$\dfrac{30x}{30} = \dfrac{-30}{30}$

$\boxed{x = -1}$

(H) $3t + 8(2t - 6) = 2 + 14t$

$3t + 16t - 48 = 2 + 14t$

$19t - 48 = 2 + 14t$
$ + 48 \quad + 48$
_____

$19t = 50 + 14t$
$-14t - 14t$
_____

$\dfrac{5t}{5} = \dfrac{50}{5}$

$\boxed{t = 10}$

(N) $9(x+3) = 4x - 3$

$9x + 27 = 4x - 3$

$-4x$

$-4x$

$\overline{}$

$5x + 27 = -3$

$-27 \quad -27$

$\overline{}$

$\dfrac{5x}{5} = -\dfrac{30}{5}$

$\boxed{x = -6}$