I vs. me

8-26-19 1st Try

Solving for variable.

① $2(3x-1)-(x-4)=6x-10$

$6x-2-x+4=6x-10$

$5x+2=6x-10$

$-5x \quad -5x$

$2=x-10$

$+10 \quad +10$

$12=x$

② $(3n^2)^3$

$3n^2 \cdot 3n^2 \cdot 3n^2$

$3nn \ 3nn \ 3nn$

$27n^6$

③ $5(n^2y+ny)-6n^2y-ny$

$5n^2y+5ny-6n^2y-ny$

$-n^2y+4ny$

④ $(n+7)^2$

$(n+7)(n+7)$

$n^2+7n+7n+49$

$n^2+14n+49$

⑤ $(4n^2)^2 \cdot n + 3n \cdot 2n \cdot 2n \cdot n^2$

$4n^2 \cdot 4n^2 \cdot n + 3n \cdot 2n \cdot 2n \cdot n \cdot n$

$4nn \cdot 4nn \cdot n$

$16n^5 + 12n^5$

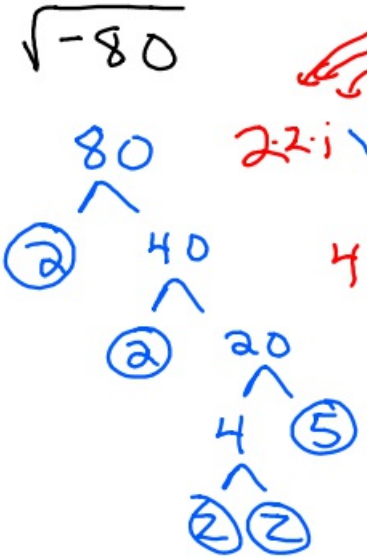
$28n^5$

⑥ $\sqrt{-80}$

80

$2 \cdot 2 \cdot i\sqrt{-1} \cdot 2 \cdot 2 \cdot 2 \cdot 5$

$4i\sqrt{5}$



⑦ $\dfrac{c^{-2} w^3 h^{-1}}{c\, w^{-2} h^{-4}}$

$\dfrac{w^2 w^3 h^4}{c c^2 h}$

$\dfrac{ww\ www\ hhhh}{ccc\ h} = \dfrac{w^5 h^3}{c^3}$

⑧ $(5a^{-2}b^3)^{-2}$

$\left(\frac{5b^3}{a^2}\right)^{-1\cdot 2}$

$\left(\frac{a^2}{5b^3}\right)^2$

$\frac{a^2}{5b^3}\cdot\frac{a^2}{5b^3}=\frac{a^4}{25b^6}$

⑨ $\left(\frac{1}{5}\right)^{-2}$

$\left(\frac{1}{5}\right)^{-1\cdot 2}$

5^2

25

8-26-19

I vs. me

① $6(2n-1)-(3n+1)=2n-5$

$12n-6-3n-1=2n-5$

$9n-7=2n-5$

$-2n \quad -2n$

$7n-7=-5$

$+7 \quad +7$

$\frac{7n}{7}=\frac{2}{7}$

$n=\frac{2}{7}$

② $(3n^4)^3$

$3n^4 \cdot 3n^4 \cdot 3n^4$

$3nnnn \; 3nnnn \; 3nnnn$

$27n^{12}$

③ $(n+5)^2$

$(n+5)(n+5)$

$n^2+5n+5n+25$

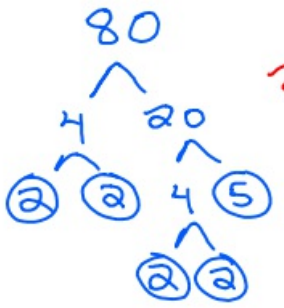
$n^2+10n+25$

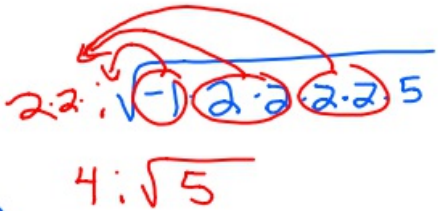
④ $2(n^2y+ny)-3(ny-n^2y)$

$2n^2y+2ny \quad -3ny+3n^2y$

$5n^2y-ny$

⑤ Simplify $\sqrt{-80}$





⑥ $\dfrac{4a^{-2}b^{2}c^{-1}}{6ab^{4}c^{-3}} =$

$\dfrac{4\ b^{2}\ c^{3}}{6\ a\ b^{4}\ a^{2}\ c}$

$\dfrac{\cancel{4}^{2}\ \cancel{b}\ \cancel{b}\ c\ c\ \cancel{c}}{\cancel{6}_{3}\ a\ \cancel{b}\ \cancel{b}\ \cancel{b}\ \cancel{b}\ a\ \cancel{a}\ \cancel{c}}$

$\dfrac{2c^{2}}{3a^{1}b^{2}}$

⑦ $(2a^{-2}b)^{-2}$

$\left(\dfrac{2b}{a^{2}}\right)^{-1\cdot 2}$

$\left(\dfrac{a^{2}}{2b}\right)^{2} = \dfrac{a^{2}}{2b}\cdot\dfrac{a^{2}}{2b} = \dfrac{a^{4}}{4b^{2}}$

⑧ $\left(\frac{1}{3}\right)^{-2}$

$\left(\frac{1}{3}\right)^{-1 \cdot 2}$

3^{2}

9

8-26-19 4th Try

I vs. me

① $2(3n-1)-(2n+1)=n-5$

$6n-2-2n-1=n-5$

$4n-3=n-5$

$-n \quad -n$

$3n-3=-5$

$+3 \quad +3$

$\frac{3n}{3}=\frac{-2}{3}$

$n=-\frac{2}{3}$

② $(n+3)^2$

$(n+3)(n+3)$

$n^2+3n+3n+9$

n^2+6n+9

③ $(2n^2y^3)^3$

$2n^2y^3 \cdot 2n^2y^3 \cdot 2n^2y^3$

$2nnyyy \quad 2nnyyy \quad 2nnyyy$

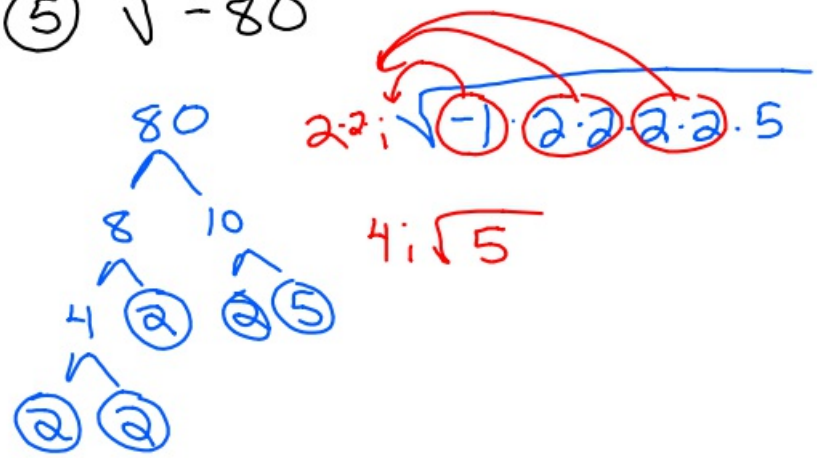
$8n^6y^9$

④ $2(3ny+5n^2y)-(3ny-2n^2y)$

$6ny+10n^2y-3ny+2n^2y$

$3ny+12n^2y$

⑤ $\sqrt{-80}$



⑥ $\dfrac{4a^{-2}b^3}{6a^{-4}b}$

$\dfrac{4\,a^{1}\,b^{3}}{6\,a^{2}\,b}$

$\dfrac{\cancel{4}^{2}\,\cancel{a}\cdot\cancel{a}\cdot a\,\cancel{b}\,b\,b}{\cancel{6}_{3}\,\cancel{a}\cdot\cancel{a}\cdot\cancel{b}} = \dfrac{2a^2b^2}{3}$

⑦ $(-5a^{-3}b^3)^{-2}$

$\left(\dfrac{-5\,b^3}{a^3}\right)^{-1\cdot 2}$

$\left(\dfrac{a^3}{-5b^3}\right)^{2}$

$\dfrac{a^3}{-5b^3} \cdot \dfrac{a^3}{-5b^3} = \dfrac{a^6}{25\,b^6}$

⑧ $\left(\frac{1}{5}\right)^{-2}$

$\left(\frac{1}{5}\right)^{-1 \cdot 2}$

5^{2}

25