April 25, 2016

#3) $56a(2a-1) - 21(2a-1)$

$(2a-1)(56a-21)$

Not A.P.!

$(2a-1)\,7(8a-3)$

$7(2a-1)(8a-3)$

Apr 25-9:02 AM

#11) $4w^2 - 16$ $a = 2w$ $b = 4$

$(2w+4)(2w-4)$

Not A.P.!

$4(w^2-4)$ $a=w$ $b=2$

$2(w+2)\,2(w-2)$

$4(w+2)(w-2)$

Apr 25-9:07 AM

#12) $1 - x^2$ $a = 1$ $b = x$

$(1+x)(1-x)$

$(x+1)(x-1)$

$x^2 - x + x - 1$

$x^2 - 1 \neq 1 - x^2$

Apr 25-9:09 AM

#13) $27x^3 + 125$ $a = 3x$ $b = 5$

$(3x+5)(9x^2 - 15x + 25)$

Apr 25-9:10 AM

#16) $25x^2 = 36$

① $25x^2 - 36 = 0$

② $(5x+6)(5x-6) = 0$

③ ① $x = -6/5$ ② $x = 6/5$

Apr 25-9:13 AM

#17) $\dfrac{6v^{-9}}{-8v^{-4}} = \dfrac{3v^{4}}{-4v^{9}}$

$= -\dfrac{3}{4v^{5}}$

OR

$\dfrac{3^{-9-(-4)}}{-4}$

$-\dfrac{3^{-9+4}}{4}$

$-\dfrac{3v^{-5}}{4}$

$-\dfrac{3}{4v^{5}}$

Apr 25-9:15 AM

#18) $\frac{x-3}{x+5} \cdot \frac{2x+10}{x^2-9}$

$\frac{x-3}{x+5} \cdot \frac{2(x+5)}{(x+3)(x-3)} = \boxed{\frac{2}{x+3}}$

Apr 25-9:19 AM

#19) $\frac{5x^2+4x}{x-1} - \frac{6x+3}{x-1}$

$\frac{5x^2+4x-(6x+3)}{x-1}$

$\frac{5x^2+4x-6x-3}{x-1}$

$\frac{5x^2-2x-3}{x-1}$

$ac = -15 \quad b = -2$

$-5 \mid 3$

$5x^2-5x+3x-3$

$5x(x-1)+3(x-1)$

$(x-1)(5x+3)$

$\frac{(x-1)(5x+3)}{(x-1)}$

$\boxed{5x+3}$

Apr 25-9:21 AM