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13. $\frac{dy}{dx} = \frac{2(3x-2) - (2x+5)(3)}{(3x-2)^2} = \frac{6x-4-6x-15}{(3x-2)^2} = \frac{-19}{(3x-2)^2}$

14. $\frac{dy}{dx} = \frac{(2x+5)(x^2) - (x^2+5x-1)(2x)}{x^4} = \frac{2x^3+5x^2-2x^3-10x^2+2x}{x^4}$

$= -\frac{5x^2+2x}{x^4} = -\frac{5}{x^2} + \frac{2}{x^3}$ or $-\frac{5x+2}{x^3}$

15. $\frac{dy}{dx} = \frac{[(1)(x^2+x+1)+(x-1)(2x+1)]x^3 - 3x^2(x-1)(x^2+x+1)}{x^6}$ ...

16. $\frac{dy}{dx} = (-1)(1+x^2)^{-1} + (1-x)(-1)(1+x^2)^{-2}(2x)$

$= \frac{-(1+x^2) + (-2x)(1-x)}{(1+x^2)^2}$ ...

17. $\frac{dy}{dx} = \frac{2x(1-x^3) - x^2(-3x^2)}{(1-x^3)^2} = \frac{2x(1-x^3)+3x^4}{(1-x^3)^2}$

18. $\frac{dy}{dx} = \frac{(\frac{1}{2}x^{-1/2})(\sqrt{x}+1) - (\sqrt{x}-1)(\frac{1}{2}x^{-1/2})}{(\sqrt{x}+1)^2}$ ...

19. $\frac{dy}{dx} = \frac{[(x+1)(1)+(1)(x+2)][(x-1)(x-2)] - [(x+1)(x+2)][(1)(x-2)+(x-1)(1)]}{[(x-1)(x-2)]^2}$

$= \frac{(2x+3)(x-1)(x-2) - (x+1)(x+2)(2x-3)}{(x-1)^2(x-2)^2}$ ...