Let $f(x) = \frac{5}{(x-3)(x+2)} = \frac{A}{(x-3)} + \frac{B}{(x+2)}$ $\frac{3X+9}{x(x^2-3)} = \frac{A}{X} + \frac{BX+C}{x^2-3}$ To find A, we have $A = A + \frac{(x-3)}{(x+2)}B$ You scored 0 out of 100 $\int_{\frac{5}{(x-3)(x+2)}}^{\frac{5}{(x-3)}} dx = A + \frac{3}{3+2}B$ You did not answer the question. You did not answer the question. Calculate the integral. Calculate the integral: $\frac{1}{x-3} - \frac{1}{x+2} \int dx$ $\int \frac{-3}{x} + \frac{6x}{x^2 - 3} dx$ = 3ln/x1+3ln/x23/+C. = ln |x-3| - ln |x+2| + C $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}$ = ln | X-3 + C $\Rightarrow A = \frac{5^2}{10} = -\frac{26}{5}$ Long division. Calculate the integral.

Calculate the integral of the integr You did not answer the question. You did not answer the question. $= \frac{-\frac{69}{5}\ln|x-11| + \frac{39}{5}\ln|x-1| + C}{5\ln|x-1| + C}$ $= \int \frac{(5x+1)(x-x^{2})}{(x^{2}-x^{2})} + \frac{5x^{2}+2}{x^{2}-x^{2}}dx = \int 5x+1+\frac{2}{x}+\frac{1}{x^{2}}+\frac{1}{x^{2}}+\frac{1}{x^{2}}dx$ x(x+1) = = \(\frac{1}{2} \tau \tau - 2 \ln |x| + 7 \ln |x - 1| + \frac{2}{x} + C

$$\begin{array}{c} x^{2} + 2x + 1 - 2 + 2 \\ (x^{2} + 20x + a^{2}) \\ y \\ 2x = 20x \\ \Rightarrow 0 = 1 \end{array}$$

Question 5

You did not answer the question.

completion of
$$\frac{2}{8x^2 + 16x + 16} dx = \int \frac{2}{8} \cdot \frac{dx}{x^2 + 2x + 2}$$

$$= \frac{1}{4} \arcsin(x + 1) + C$$

$$= \frac{1}{4} \arctan(x + 1) + C$$

$$= \frac{1}{4} \arctan(x + 1) + C$$

$$= \frac{1}{4} \arctan(x + 1) + C$$

Partial Fraction

$$\frac{1}{4}\operatorname{arccot}(x+1) + C$$

$$a_0 = 2(8x^2 + 16x + 16)^{3/2} + C$$

$$\frac{32x}{(8x^2 + 16x + 16)^2} + C$$

You did not answer the question. $C = \frac{4.6}{12} = 12$

$$\ln|x + \delta| - \frac{12}{x - \delta} + \ln|x - \delta| + C$$

$$-\ln|x + \delta| - \frac{12}{x - \delta} - 3\ln|x - \delta| + C$$

$$= 2m|x+6|+3m|x-6| - \frac{3}{(x-6)^2}dx$$

$$= 2m|x+6|+3m|x-6| - \frac{12}{(x-6)^2}dx$$

$$\ln |x + 6| - \frac{12}{x - 6} + 3 \ln |x - 6| + C$$

$$\ln|x + \delta| - \frac{12}{(x - \delta)^2} + 3\ln|x - \delta| + C$$

2 ln
$$|x + \delta| - \frac{12}{x - 6} - \ln|x - \delta| + C$$

You did not answer the question.

$$G = \int_{X+2}^{2} + \int_{X+2}^{3} + \int_{X+4}^{2} dX$$

a)
$$=$$
 $-\frac{5}{16}$ arctan $\left(\frac{1}{2}x\right) + \frac{5}{16}$ ln $\left|\frac{x+2}{x-2}\right| + C$

$$\frac{5}{16} \operatorname{arccot}\left(\frac{1}{5} v\right) + \frac{5}{32} \ln\left|\frac{x-2}{x+2}\right| + C$$

$$\frac{5}{16} \operatorname{arccot}\left(\frac{1}{2}x\right) - \frac{5}{16} \ln\left|\frac{x-2}{x+2}\right| + C$$

$$-\frac{1}{16}\arctan\left(\frac{1}{5}x\right) + \frac{1}{32}\ln\left|\frac{x+2}{x-2}\right| + C$$

e)
$$-\frac{5}{16}\arctan\left(\frac{1}{2}x\right) + \frac{5}{32}\ln\left|\frac{x+2}{x+2}\right| + C$$

You did not answer the question.

Calculate the integral

$$\int \frac{3x+3}{x^3+x^2} dx = \int \frac{3(x+1)}{x^2(x+1)} dx = \int \frac{3}{x^2} dx$$

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

Partial fraction
$$\frac{5}{X^{4}-16} = \frac{5}{(x^{7}4)(x^{-2})(x^{7}2)}$$

$$= \frac{A}{x+2} + \frac{B}{x-2} + \frac{Cx+D}{x^{2}+4}$$

$$A = \frac{5}{(x^{7}4)(-4)} = \frac{5}{32}$$

$$B = \frac{5}{8\cdot 4} = \frac{5}{32}$$

as
$$x=0$$
, $\frac{5}{-6} = \frac{5}{32} \cdot \frac{1}{2} + \frac{5}{32} \cdot \frac{1}{2}$

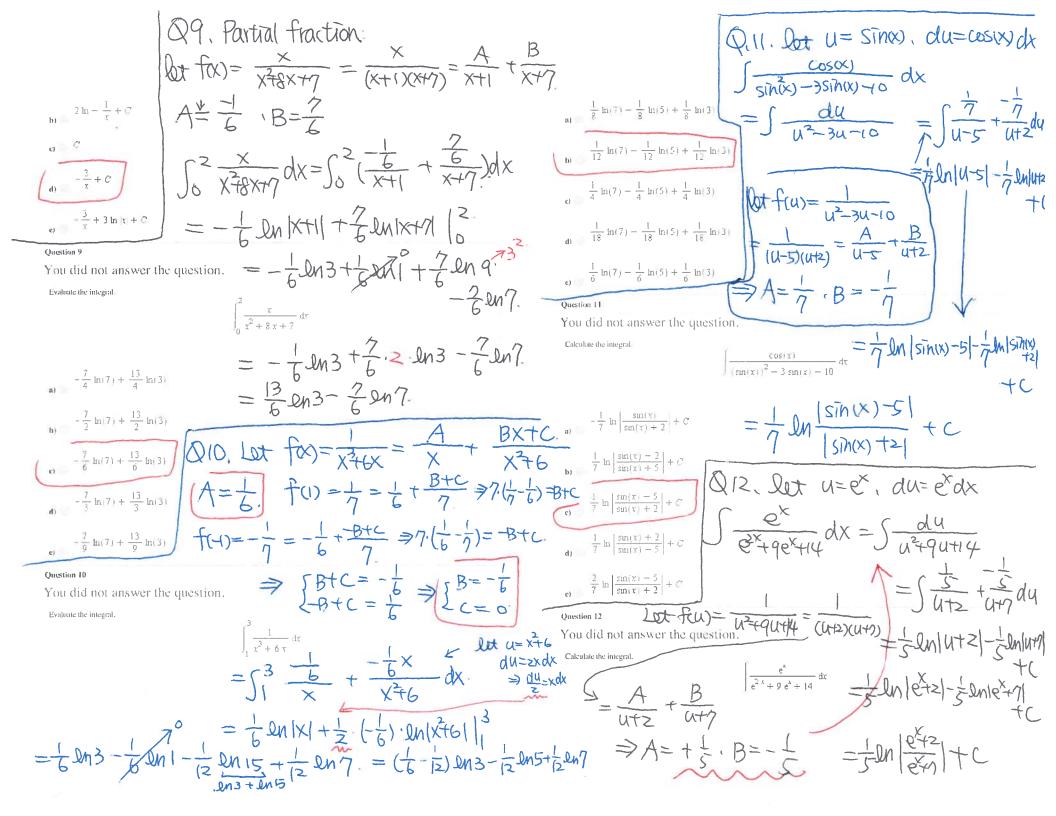
$$\frac{(x_{74}^{2})(x_{74}^{2})}{(x_{74}^{2})(x_{72}^{2})} = \frac{5}{32} = \frac{5}{6} = \frac{5}{4}$$

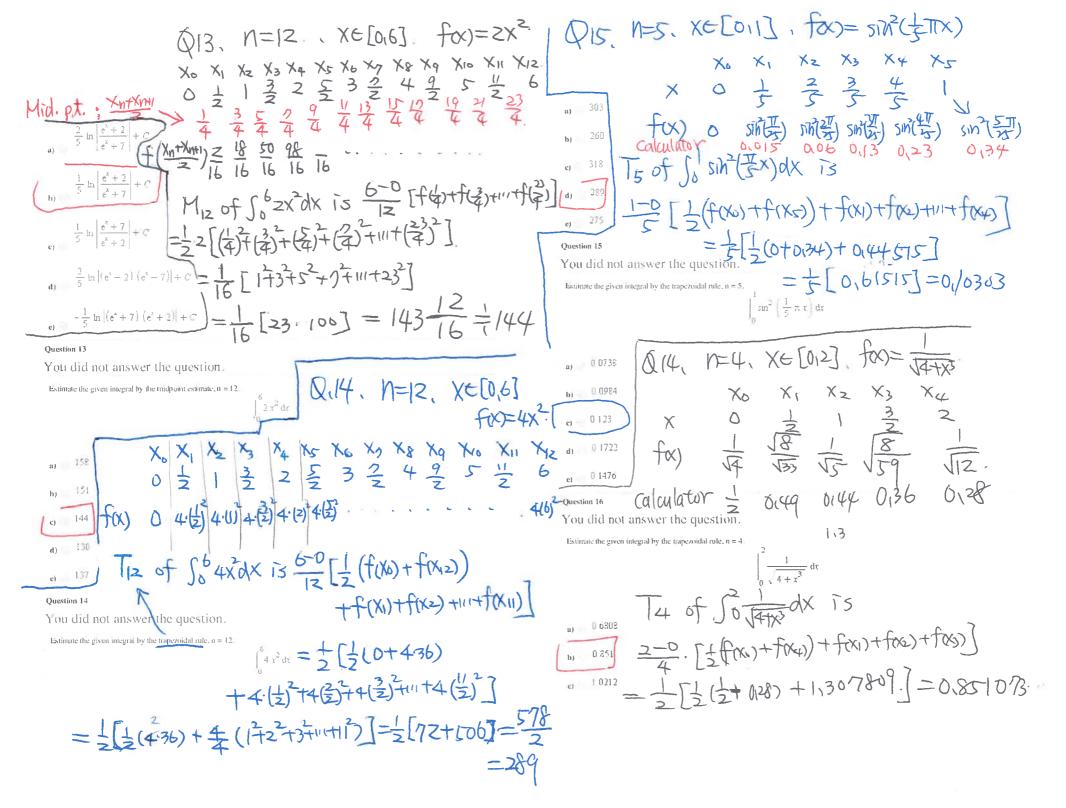
$$\frac{5}{32} = \frac{5}{4}$$

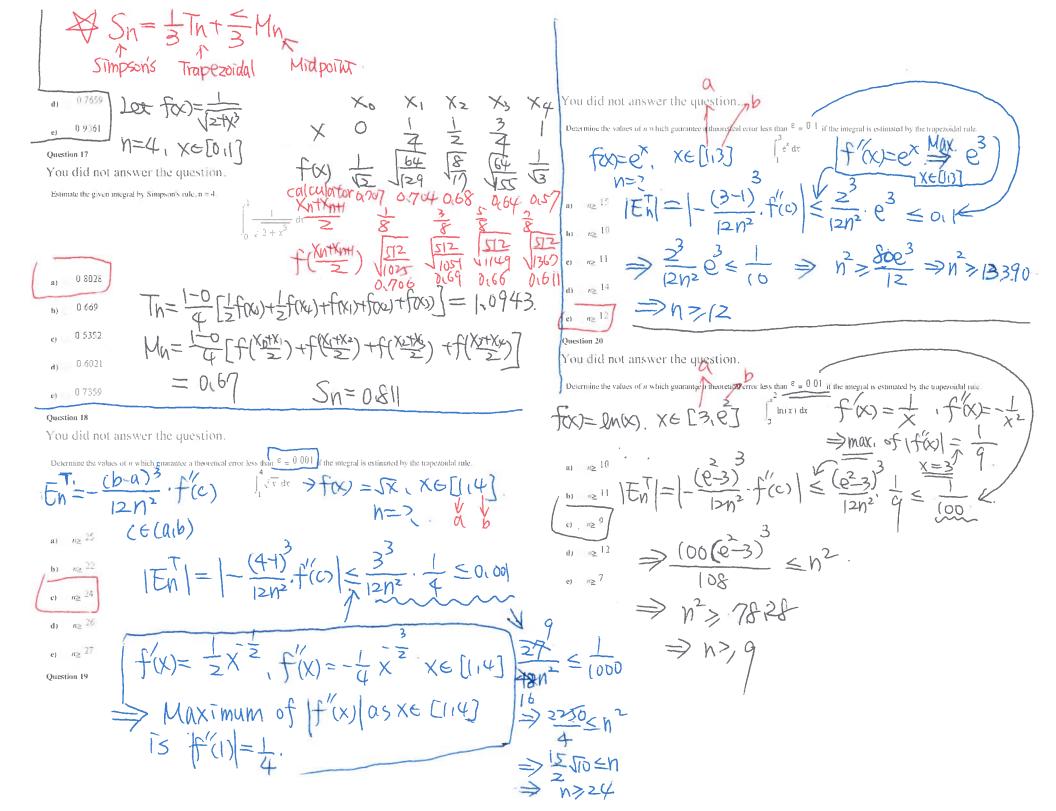
$$\Rightarrow D = 8$$

$$-\frac{1}{3} = \frac{5}{32} \cdot \frac{1}{3} + \frac{5}{5} \cdot (1) + \frac{1}{5} = \frac{4}{3} + \frac{1}{3} + \frac{1}{5} = \frac{1}{3} + \frac{1}{3} + \frac{1}{5} = \frac{1}{3} + \frac{1}{3} + \frac{1}{5} = \frac{1}{3} + \frac{1}{3$$

$$\left[0=5\left(\frac{1}{3},\left(-\frac{3}{8}\right)\right]+\frac{5}{8}=0\right]$$







Reviews:

$$|+2+3+11+N = \frac{N(N+1)}{2}$$

 $|+2+3+11+N = \frac{N(N+1)(2N+1)}{6}$