

1:00pm

M4X00391

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~~C) (i) (iii)~~

$$\int \frac{15x^2 - 4x}{5x^3 + 2x^2 + 5} dx$$

$$= \ln(5x^3 + 2x^2 + 5) + c$$

$$(ii) \int \frac{7}{4x-15} dx$$

$$\therefore 7 \int \frac{1}{4x-15} dx$$

$$\therefore = \frac{7}{4} \ln(4x-15) + c$$

$$(iii) \int \tan^2 x dx$$

$$= \tan(x) - x + c$$

$$(d) \int \frac{x^3}{\sqrt[3]{2+x^4}}$$