

$$\sqrt{a \cdot b} = \sqrt{a} \cdot \sqrt{b}$$

$$\bullet \int \sqrt{7x^3} dx$$

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$$= \sqrt{7} \int x^{3/2} dx = \sqrt{7} \cdot \frac{x^{5/2}}{5/2} = \frac{2}{5} \sqrt{7} \cdot x^{5/2} + C$$