

In the discussion area, solve your two custom application problems using the concepts you have learned. Apply your CINs in the bracketed spaces (the first digit is [a], the second digit is [b], and so forth.)

Problems

1. Evaluate $\int_1^{[c]} x \sqrt{[b]x^2 + [d]} dx$ and round your answer to two decimal places.
2. Approximate the area under the curve defined by the following data points.

x	1	4	7	10	13	16	19	22	25
y	[a]	4.6	[b]	6.2	[c]	5.5	[d]	7.8	[e]

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Problems

1. The acceleration of a particle is given by the equation:

$$A = [a] \times t. \text{ If } V = [e] \text{ m/s at } t = 1 \text{ and } S = 12\text{m at } t = 1 \text{ sec.}$$

Find S at t=2 sec.

2. Find the area between the curves for the equations below and round your answer to one decimal place.

$$y = x^2 + [b]x - 4 \text{ and } y = x + [a]$$