Trigonometry Unit Exam: Question 21

Ana Bhattacharjee

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We first need to find the volume of the box being shipped. Once we find the volume of the box being shipped, we need to find the volume of each cookie box. We then divide the volume of the box being shipped by the volue of the cookie box. This will give us a number of how many cookie boxes will fit into the box being shipped.

$$V_{\text{shipping}} = 10 * 10 * 12 \rightarrow 1200 \tag{1}$$

$$V_{\text{cookie}} = 2 * 5 * 3 \rightarrow 30 \tag{2}$$

$$n_{\text{cookie}} = \frac{V_{\text{shipping}}}{V_{\text{cookie}}} = \frac{1200}{30} = 40 \tag{3}$$

40 cookie boxes will fit into the box.