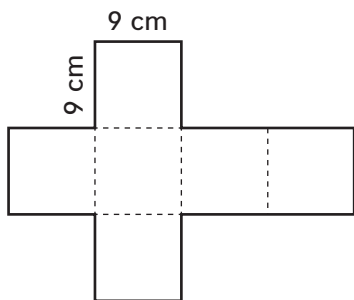


Surface Area Using Nets

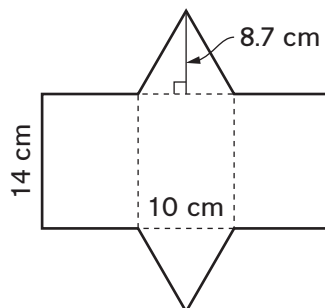
Silly Socks is trying to choose a type of plastic box for their socks. The nets for three different box designs are given below.



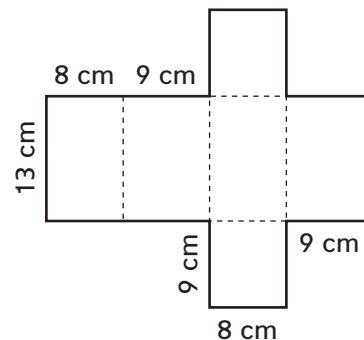
Design 1



Design 2



Design 3



- ① Without calculating, predict which design will require the least amount of plastic to produce.

Answers vary.

- ② Find the surface area for each plastic-box design. Write a number sentence to show how you found the surface area. Remember to use the correct order of operations.

Box Design	Surface Area	Number Sentence
Design 1	486 cm ²	$6 * 9^2 = 486$
Design 2	507 cm ²	$2(5 * 8.7) + 3(10 * 14) = 507$
Design 3	586 cm ²	$2(13 * 8) + 2(13 * 9) + 2(8 * 9) = 586$

- ③ Explain how to find the surface area for any rectangular or triangular prism.

Sample answer: Break the net into polygons and then find the sum of the polygon areas.

Practice Divide. Find your answer to the nearest hundredth.

④ $8 \overline{) 879.25} = 109.90625$

⑤ $18 \overline{) 373.5} = 20.75$

⑥ $54 \overline{) 122.67} = 2.271666...$