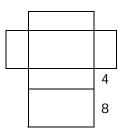
This flat pattern can be folded on the dashed lines to make a box.

1. What will the surface area of the box be?



12

2. What will the volume of the box be?

Sweet Tooth Chocolates is marketing a special assortment of caramels. They want to put 18 individual caramels in a box. Each caramel is 1 cubic inch.

- 3. List all the ways 18 caramels can be neatly packaged into a box (4 ways).
- 4. Which arrangement of caramels would require the most cardboard for the box?
- 5. Which arrangement of caramels would require the least cardboard for the box?
- 6. On grid paper draw a flat pattern for the box you described in question 5.