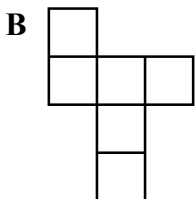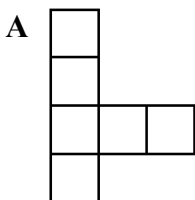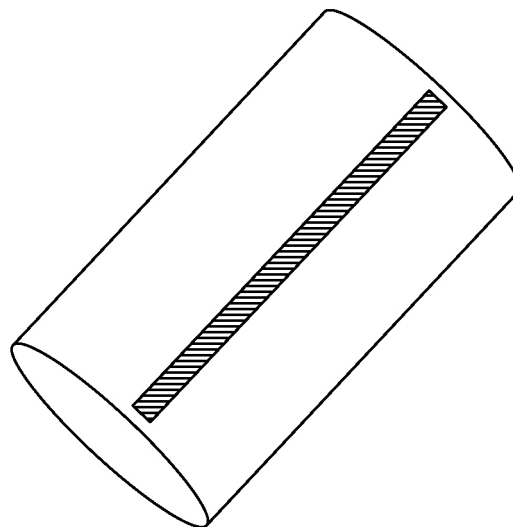# Section 6.3 Create Nets, Plans, and Patterns

1. Describe the differences between nets, plans, and patterns when comparing two-dimensional representations of three-dimensional objects.

2. Sketch an example of a net, a plan, and a pattern.

3. Sketch a pattern that could be used to make a T-shirt.

4. Sketch a net that could be used to make a box in the shape of an equilateral triangular prism.

5. Sketch a net that can be used to construct a cube of side length 10 cm.

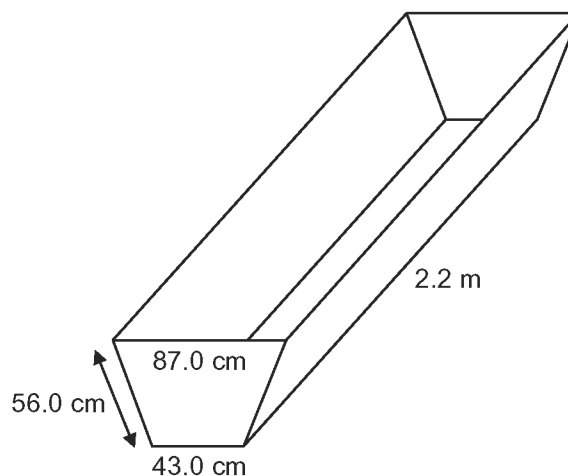**6.** Which net could be folded into a cube? Explain.

A

B

7. Here is the design for a new cylindrical denim pencil case.

The pencil case is to have a length of 24 cm and a radius of 6 cm. Create a pattern that can be used to make the pencil case.

8. Consider this design for a trough.

2.2 m

87.0 cm

56.0 cm

43.0 cm

a) Draw a net that can be folded into the shape of the trough.

b) Draw plans for the individual pieces of the trough.