PRACTICE FOR TAKS OBJECTIVE 8
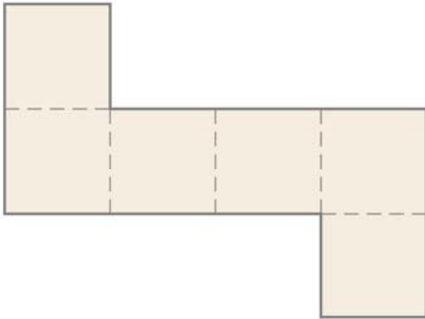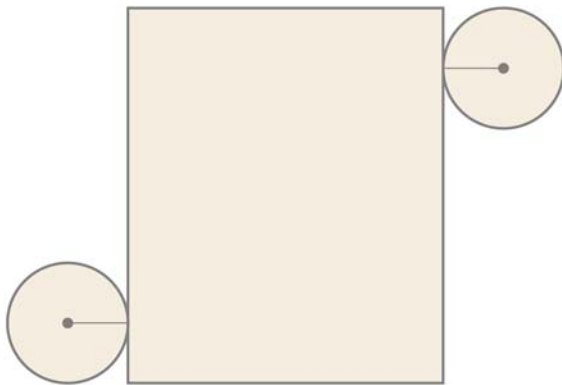
1. The net of a cube is shown below.

Use a ruler to determine the dimensions of the cube to the nearest tenth of a centimeter. Which best represents the volume of this cube to the nearest cubic centimeter?
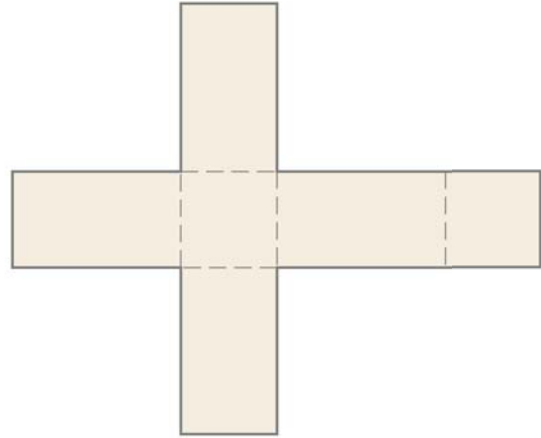
A 2 cm^3

B 3 cm^3

C 4 cm^3

D 12 cm^3

2. The net of a cylinder is shown below.

Use a ruler to determine the dimensions of the cylinder to the nearest tenth of a centimeter. Which is closest to the total surface area of this cylinder?

F 8 cm^2

G 21 cm^2

H 25 cm^2

J 42 cm^2

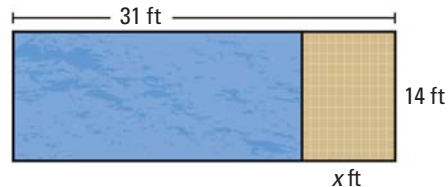**3.** The net of a rectangular prism is shown below.

Use a ruler to determine the dimensions of the prism to the nearest $\frac{1}{8}$ inch. Find the surface area of the prism to the nearest square inch.

A 1 in.^2

B 2 in.^2

C 3 in.^2

D 4 in.^2

MIXED TAKS PRACTICE

4. A room has the dimensions shown below. Part of the room is being carpeted. The remainder of the room is being laid with tile. The area to be tiled is $14x$ square feet. How can the area of the carpeted region be expressed in terms of x? *TAKS Obj. 2*

F $31 - 14x$

G $\dfrac{31(14)}{x}$

H $\dfrac{(31 - x)}{14}$

J $14(31 - x)$