CHAPTER

10

TEST CHAMBER

SURFACE AREA

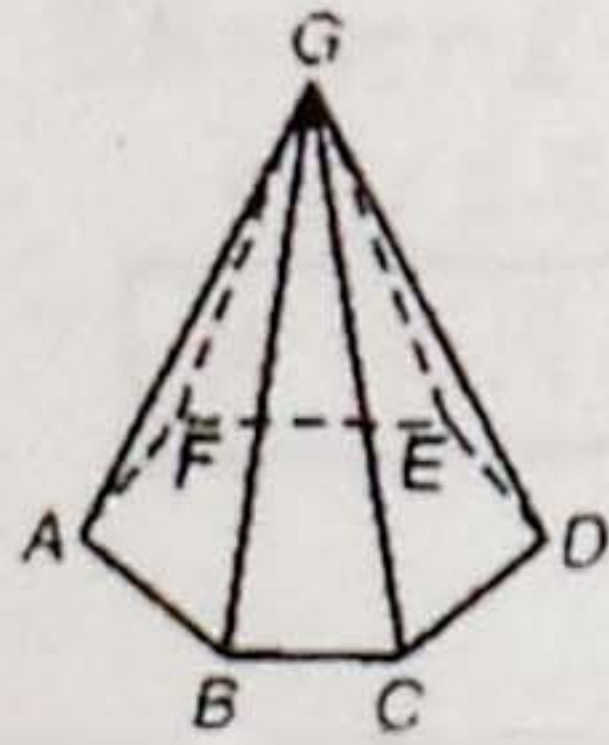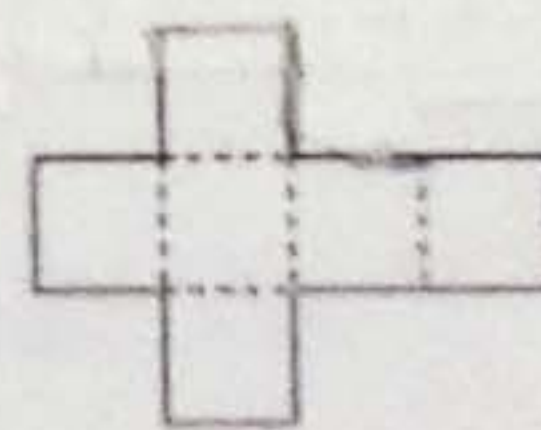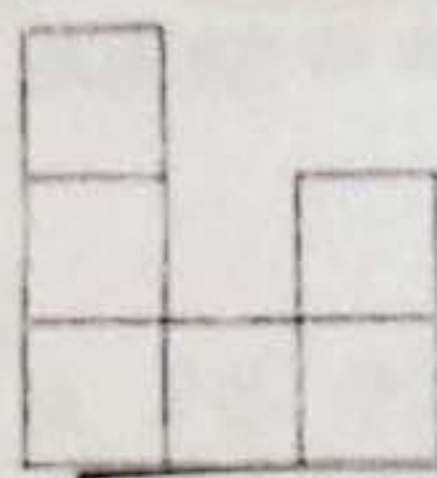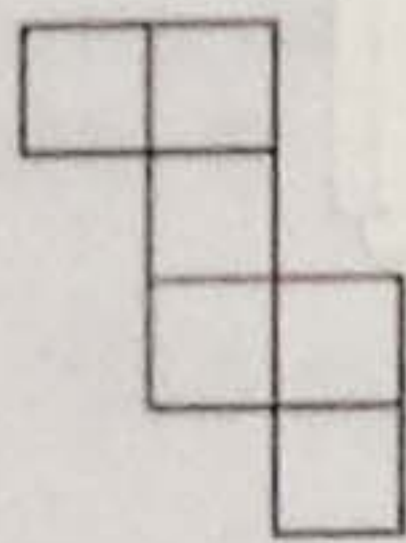**Part 1** (These will be multiple choice, but you will be required to show work)
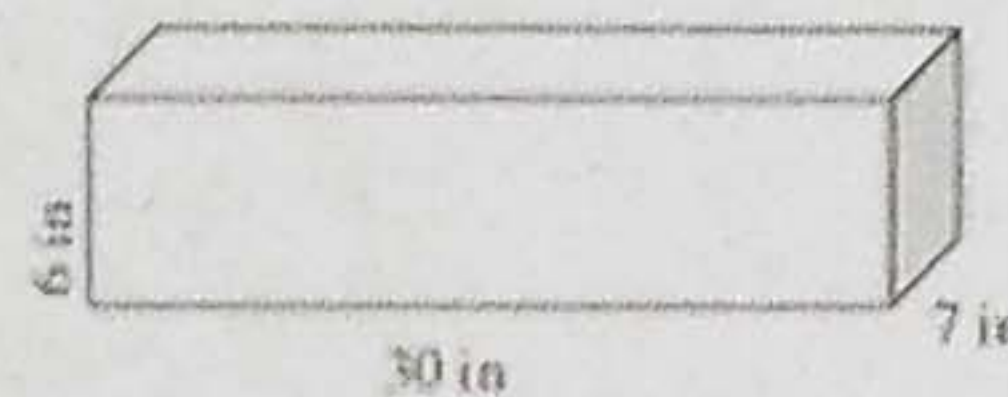
1. Name the vertices: (NO WORK)
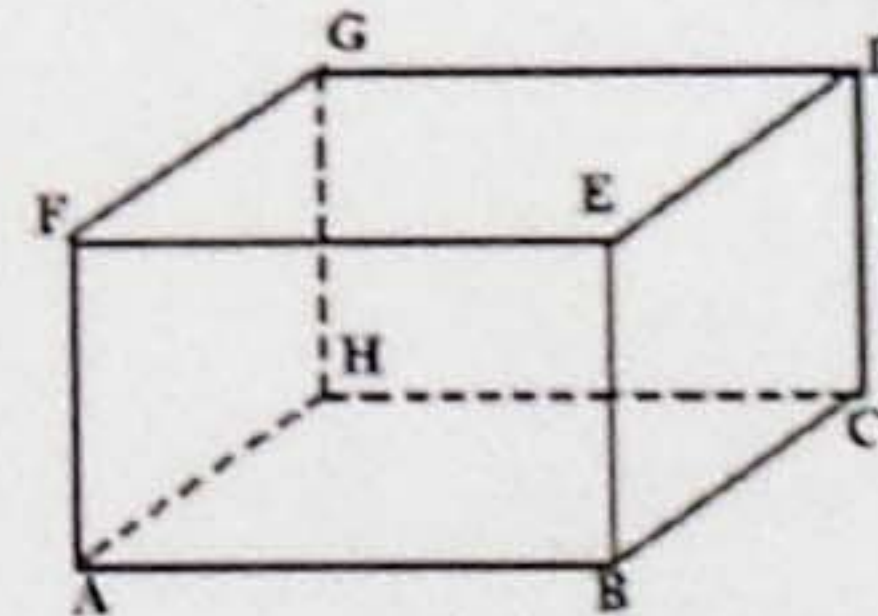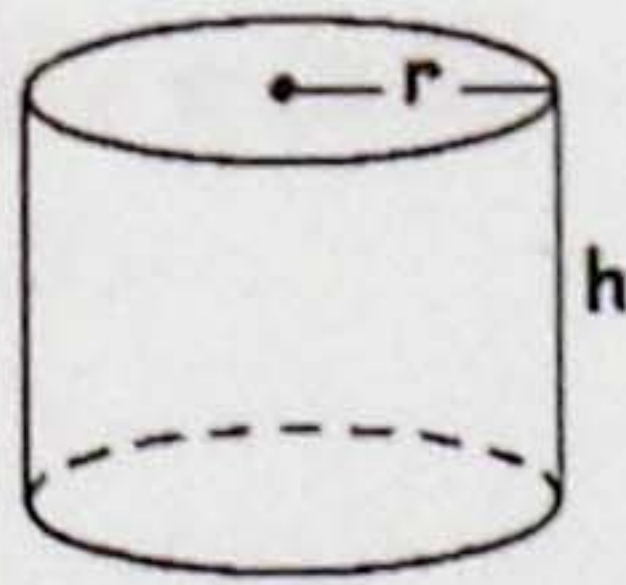
2. What is the classification of a three dimensional figure if the base is hexagonal and the other faces are triangular? (NO WORK)
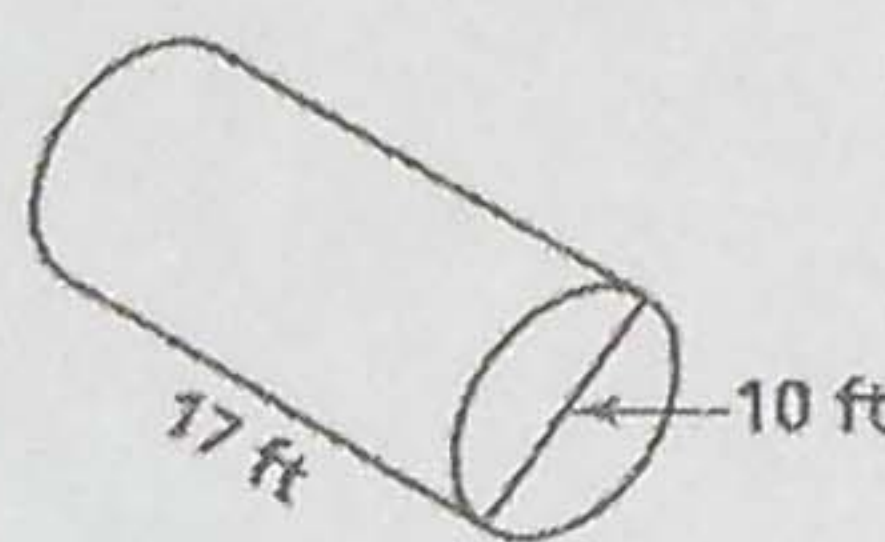
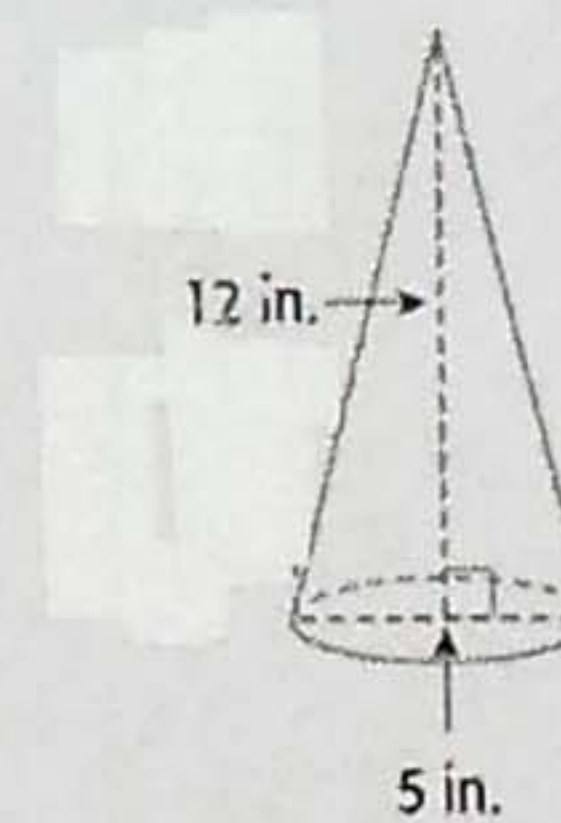3. Which of these shapes CANNOT be folded to form a cube? (NO WORK)

4. **What is the lateral area of the rectangular prism?** (assume the 30 x 7 side is the base)

6 in

30 in

7 in

5. **What is the surface area of the cylinder?**

17 ft

—10 ft

6. **What is the surface area of the right cone?**
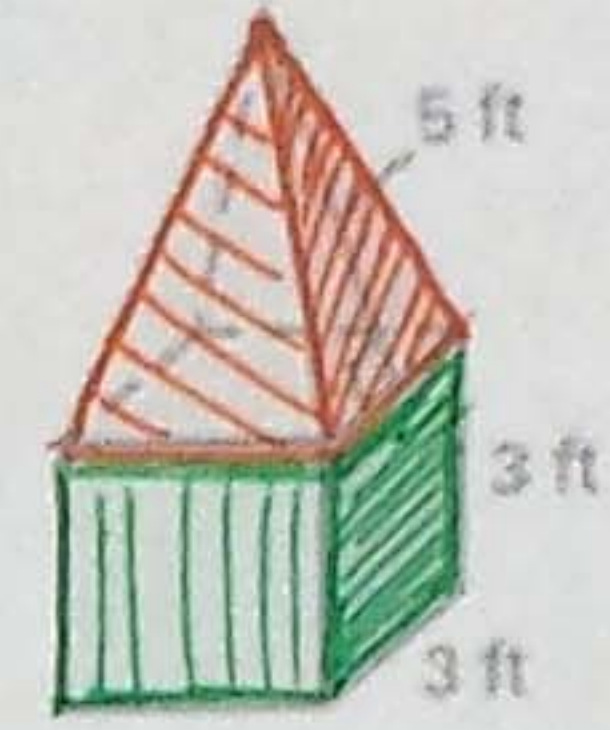
12 in.—►

5 in.

7. **What is the surface area of the sphere?**

16 in
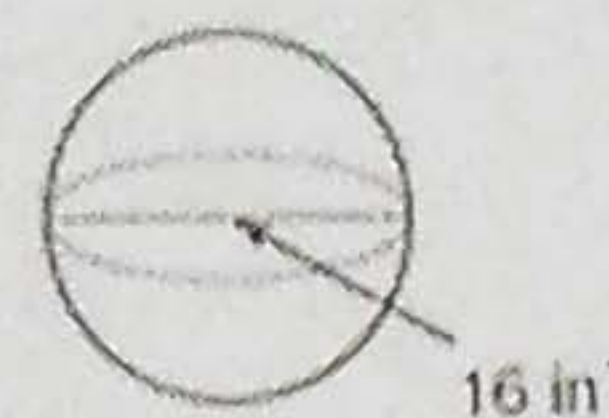
8. **What is the effect on the surface area of a triangular prism if all dimensions are multiplied by 4?**
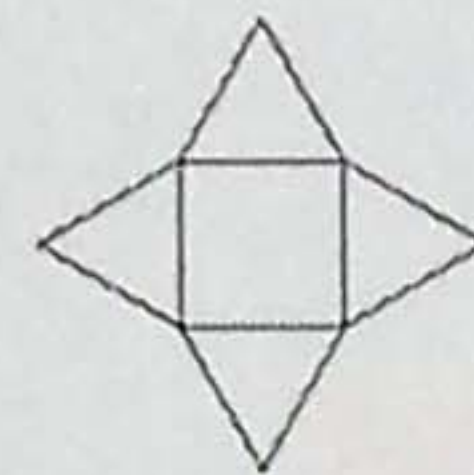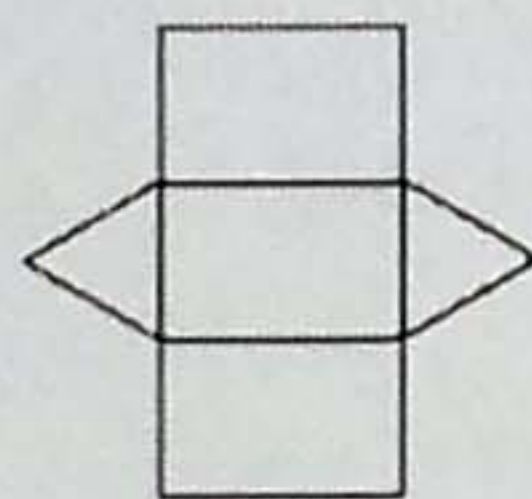
9. What is the **surface area** of the composite figure?
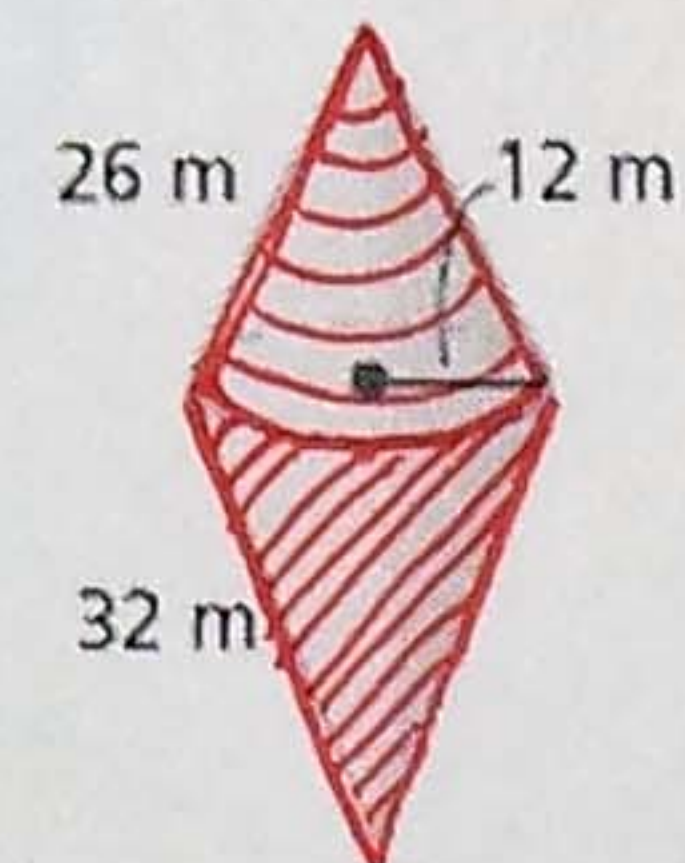(The figure is a cube with a pyramid on top)

5 ft
3 ft
3 ft

Part 2 (These will be regular questions, and you will be required to show work)

10. **Write the number of vertices, edges and faces on a pentagonal pyramid.**
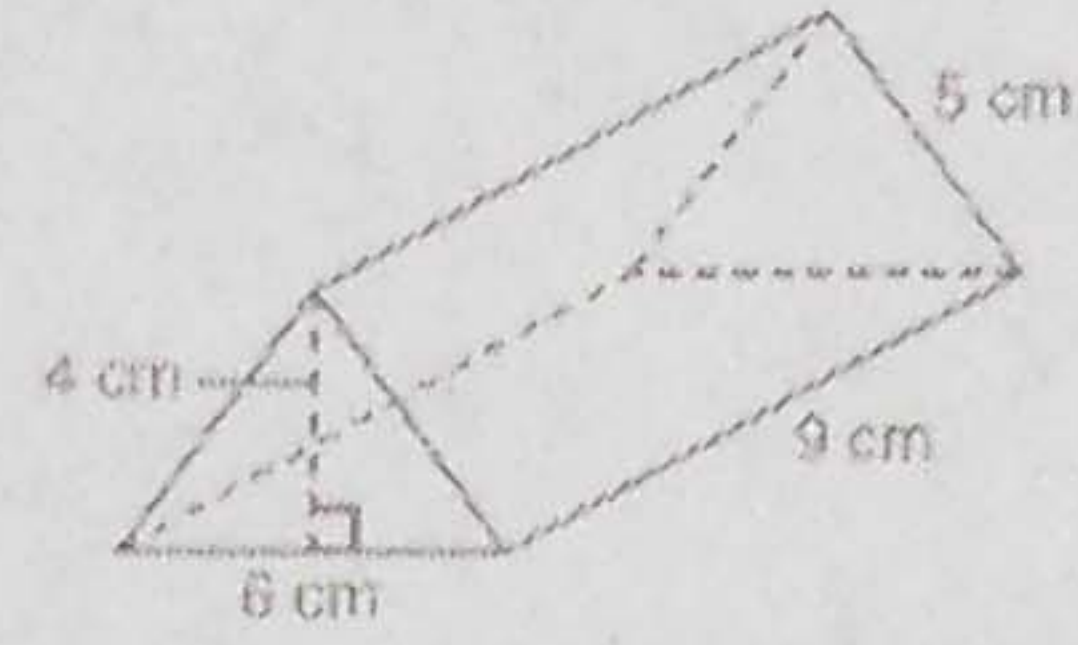Draw a diagram.

11. **Give the name of the figure represented by the given net.**

12. **Find the surface area of the composite figure below** (two cones)

26 m   12 m

32 m

13. **Find the** <u>lateral area</u> **and** <u>surface area</u> **of the regular triangular prism.**
(height = 4cm, slant height = 5cm, side length = 6cm, length of figure = 9cm)

14. **Find the** <u>surface area</u> **of a hemisphere with great circle area 144mm.**
Draw a diagram with dimensions labeled, then calculate.

15. **Find the** <u>surface area</u> **of a right triangular prism with base edge 36 in, height 15 in, slant height 39in, and length 48in.** Draw a diagram <u>and</u> net with dimensions labeled, and then calculate.

Diagram:
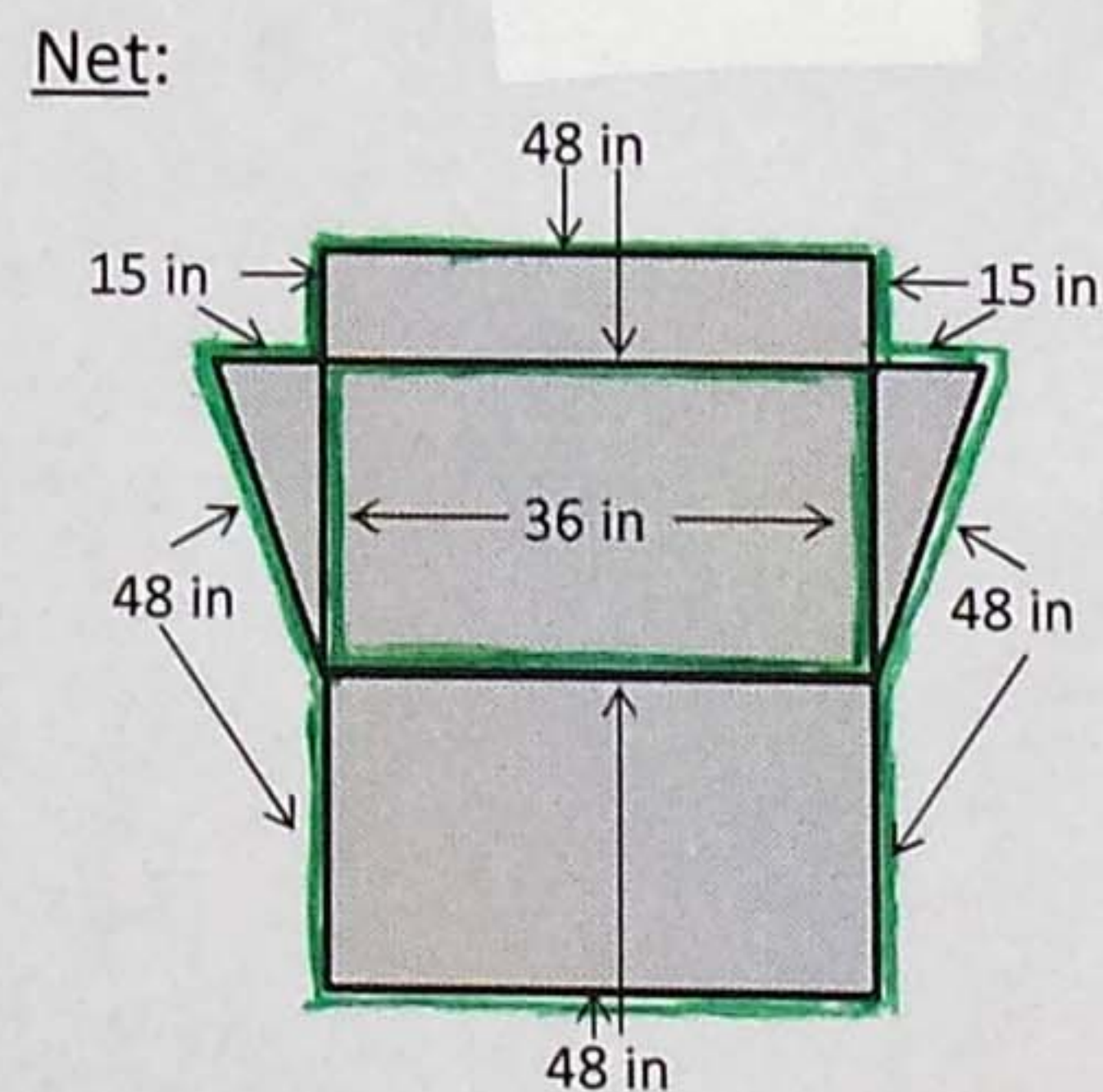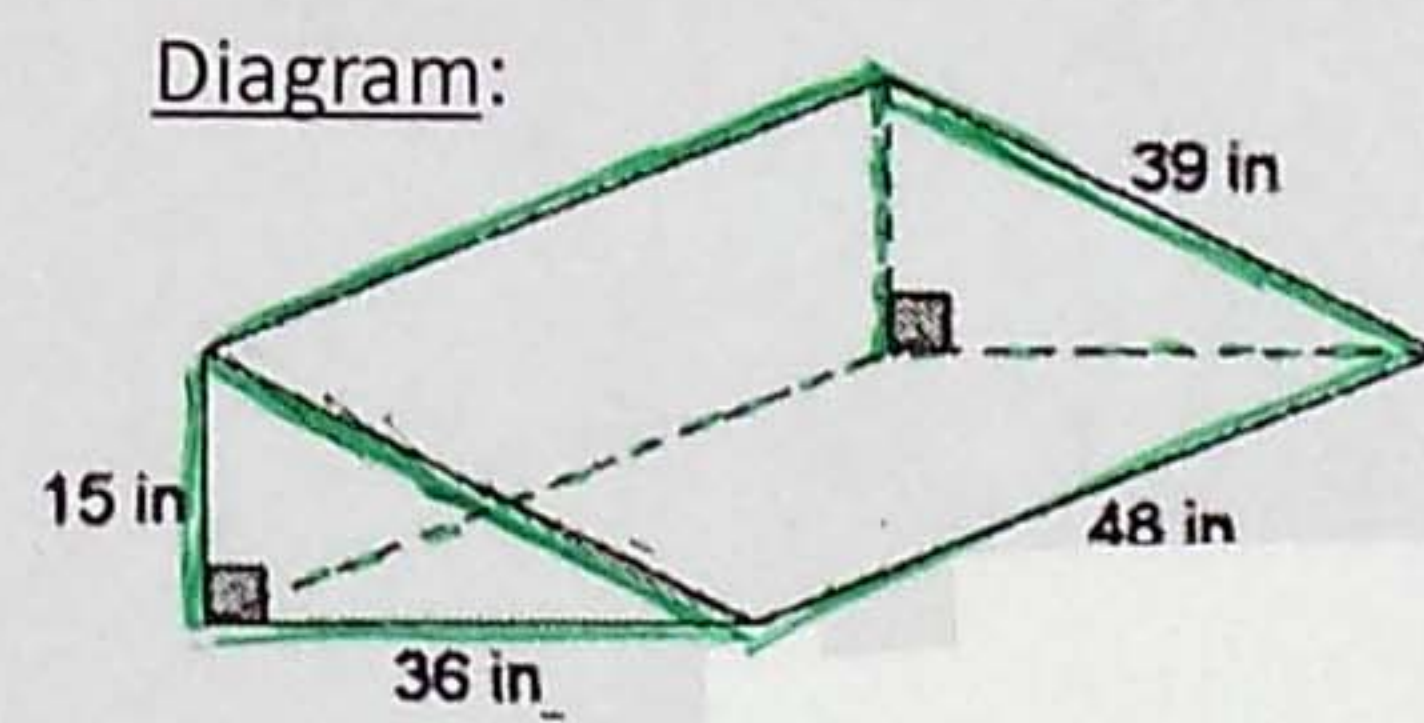
YOU WILL HAVE TO DRAW THESE ON THE TEST.

Net:

**Note: You will have a different shape on the test*

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