

# Grade 6 - Nets and Surface Area - Test

Common Core 6.G.A.4 · maths-pdf.fr/en/

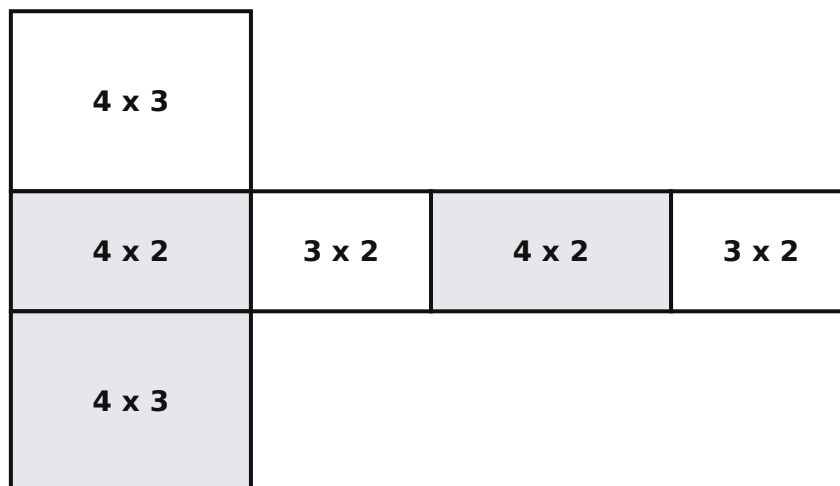
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

This 45-minute test has 9 questions worth 20 points. It covers nets, surface area of prisms and pyramids, missing dimensions, and real-world problems (Common Core 6.G.A.4). Show your work for full credit.

## About this test

- Grade: Grade 6
- Chapter: Nets and Surface Area
- Standards: 6.G.A.4
- Time: 45 minutes
- Total: 20 points

## Question 1 - Rectangular prism [2 pts]



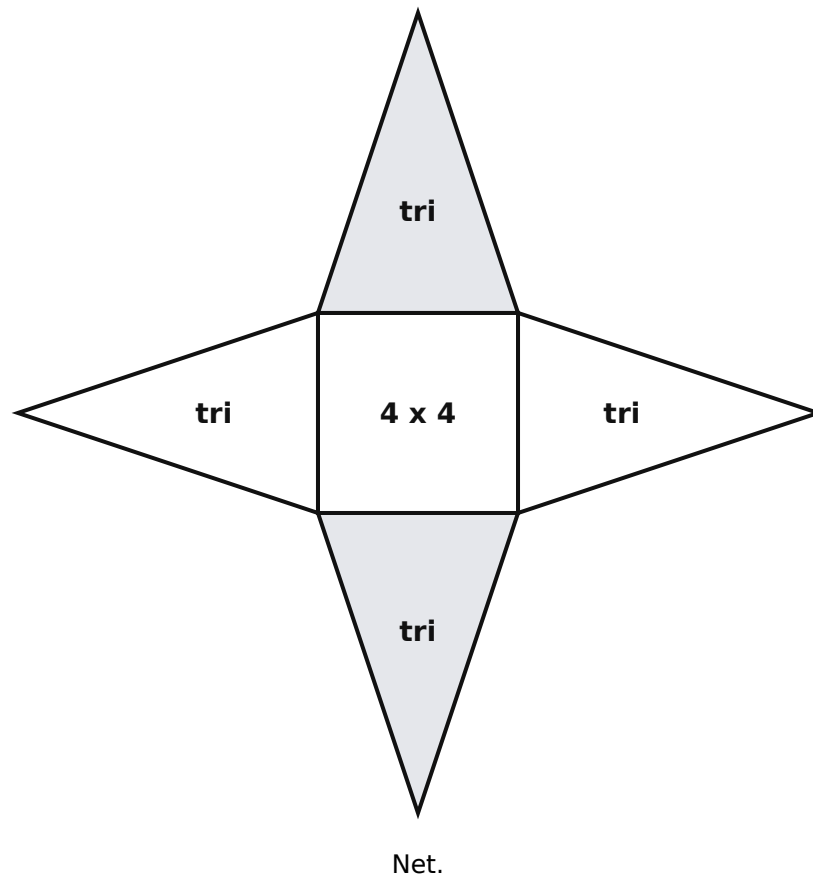
Net.

Find the surface area of the prism with this net (centimeters).

## Question 2 - Cube [2 pts]

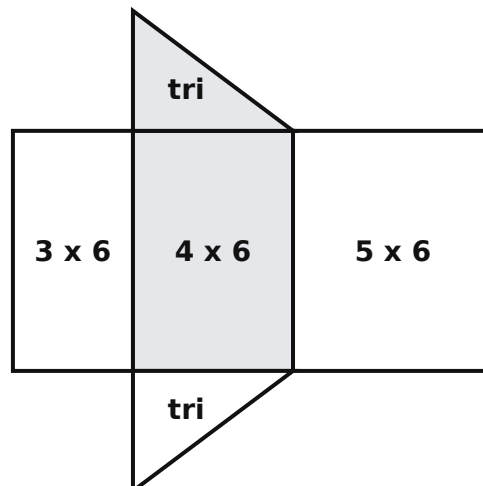
Find the surface area of a cube with edge length 9 centimeters.

### Question 3 - Pyramid [2 pts]



The square pyramid has a base 4 meters by 4 meters and triangular faces with height 6 meters. Find the surface area.

### Question 4 - Triangular prism [2 pts]



Net (inches).

Find the surface area of the triangular prism with triangle sides 3, 4, 5 and length 6 inches.

**Question 5 - Find the edge [2 pts]**

A cube has a surface area of 216 square feet. Find its edge length.

**Question 6 - Wrap it [2 pts]**

A shoe box is 14 inches long, 8 inches wide, and 5 inches tall. Find the area of cardboard in the box (all 6 faces).

**Question 7 - Open box [2 pts]**

A toy chest has no lid. It is 4 feet long, 2 feet wide, and 2 feet tall. Find the area of wood needed.

**Question 8 - Compare [3 pts]**

Box A is 3 by 3 by 6 inches. Box B is 4 by 4 by 3 inches. Find both surface areas and tell which box needs more material.

**Question 9 - Paint cost [3 pts]**

A wooden cube has edge 3 feet and all six faces are painted. Paint costs \$0.40 per square foot. Find the cost.