

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

Questions

1. How many faces, edges, and vertices does a triangular prism have?
1. How many faces, edges, and vertices does a triangular prism have?
2. How many faces, edges, and vertices does a rectangular prism (box/cuboid) have?
3. How many faces does a cube have? How many edges? How many vertices?
4. How many faces are shown in a net of a cube?
5. A net shows two congruent triangles and three rectangles connected in a row. What 3D solid is formed?
6. A net of six congruent squares connected in a T-shape folds into which solid?
7. A triangular prism has triangular bases with side lengths 6, 5, 5 and the prism length (height between bases) is 10. Find its surface area.
8. A triangular prism has triangular base a right triangle with legs 3 cm and 4 cm and prism length 12 cm. Find the surface area.
9. A triangular prism has triangular base with sides 5 cm, 5 cm, 8 cm (isosceles with base 8) and prism length 7 cm. Find the surface area.
10. A net for a triangular prism shows rectangles 10×5 , 10×5 , and 10×8 (all in cm) with two triangular bases each of area 12 cm^2 . What is the total surface area?
11. A triangular prism has lateral rectangles measuring 9×4 , 9×3 , and 9×5 (in cm) and each triangular base has area 6 cm^2 . Find the surface area.
12. A triangular prism has lateral rectangles 8×5 , 8×6 , and 8×7 (cm) and each triangular base area is 15 cm^2 . Find the surface area.
13. A rectangular prism has length 8 cm, width 5 cm, and height 4 cm. Find its surface area.
14. A net has pairs of rectangles 6×4 , 6×3 , and 4×3 (each pair appears twice). What surface area does this net form when folded into a rectangular prism?
15. A rectangular prism measures 10 cm by 3 cm by 2 cm. Find the surface area.
16. A rectangular prism has width 5 cm and height 4 cm. If the total surface area is 220 cm^2 , find the length.
17. A cube has side length 6 cm. Find its surface area.
18. A net with rectangles 7×3 , 7×4 , and 3×4 (each pair appears twice) folds into a box. Find the surface area.
19. A box measures 12 cm by 5 cm by 2 cm. Find the surface area.
20. A cereal box is 22 cm long, 12 cm wide, and 3 cm high. What is its surface area?
21. A rectangular prism has length 9 cm and width 6 cm. If its total surface area is 348 cm^2 , what is the height?
22. A net includes rectangles 8×5 , 8×2 , and 5×2 (pairs). What is the surface area of the folded box?
23. A cuboid measures 15 cm by 4 cm by 3 cm. Find the surface area.
24. A shoebox measures 30 cm x 20 cm x 10 cm. How much wrapping paper (surface area) is needed to cover the outside?



Math Worksheet for 6th Grade

Nets of 3D figures

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25. A box measures 12 in by 6 in by 4 in. If 1 in² stickers will cover the outside, how many stickers are needed to cover the surface?
26. A rectangular prism has length 14 cm, width 5 cm, and height 3 cm. Find the surface area.
27. You need to wrap a gift box measuring 25 cm by 20 cm by 5 cm. What area of wrapping paper is needed (surface area)?
28. A box measuring 8 cm by 6 cm by h has surface area 348 cm². Find h.
29. A box net shows rectangles 11x4, 11x6, and 4x6 (pairs). What is the surface area?
30. A rectangular prism has length twice its width. If the width is 4 cm and height is 3 cm, find surface area.
31. A box measures 14 cm by 6 cm by 2 cm. What is the area of the largest face?
32. A net includes rectangles 9x7, 9x3, and 7x3 (pairs). Find the surface area of the folded box.
33. A triangular prism has a right-triangle base with sides 6 cm, 8 cm, 10 cm and prism length 12 cm. Find the surface area.
34. A box measures 3 m by 2 m by 1 m. What is the surface area in square meters?
35. A box is 50 cm by 40 cm by 30 cm. Find the total surface area in cm².
36. A cube is built from small 1 cm³ cubes and its side length is 4 cm. How many small cubes lie on the surface (i.e., how many 1x1 faces cover the outside)?
37. A rectangular prism measures 20 cm by 10 cm by 5 cm. If wrapping paper costs \$0.02 per cm², how much will it cost to wrap the outside once?
38. A triangular prism has triangular base area 10 cm² and lateral rectangles 8x3 cm, 8x4 cm, and 8x5 cm. What is the total surface area?
39. A rectangular prism measures 11 cm by 7 cm by 4 cm. Find the surface area.
40. A small parcel measures 18 cm by 12 cm by 6 cm. Find the surface area for shipping label and wrap.
41. A long block is 30 cm by 2 cm by 2 cm. Find the surface area.
42. The net of a triangular prism shows two triangles with area 24 cm² each and rectangles 12x6, 12x8, and 12x10. What is the total surface area?
43. A box has face rectangles 13x5, 13x7, and 5x7 (pairs). What is the surface area?
44. A manufacturer will cut nets for a triangular prism whose triangular base is a 5-12-13 right triangle (area 30 cm²). If the prism length is 20 cm, what is the surface area?
45. A rectangular prism has length 13 cm, width 5 cm, and height h. If the total surface area is 346 cm², find h.
46. A cuboid measures 9 cm by 5 cm by 3 cm. How many 1x1 cm squares are needed to cover its surface?
47. A box has width 6 cm, height 4 cm and length l. If surface area is 208 cm², find l.
48. A net for a box has rectangles 16x4, 16x5, and 4x5 (pairs). What surface area does it fold into?
49. A triangular prism has triangular base a 3-4-5 right triangle (area 6 cm²) and prism length 7 cm. Find the surface area.
50. A box measures 14 cm by 6 cm by 8 cm. What is the total surface area?