



GRADE 7 · GEOMETRY · HOMEWORK

SURFACE AREA OF PRISMS

Today's goal: I can determine the surface area of three-dimensional prisms in mathematical problems and determine the surface area of three-dimensional prisms in real-world problems.



Pick your peppers!

Everyone does Mild & Medium. Then climb as high as you can.



Mild

Tan the Turtle



Medium

Digit the Fox



Spicy

Blaze the Dragon



Extra Spicy

Pi the Owl

WATCH MR DJ SOLVE

Find the volume of that cube.

1 $5^3 = 125$ cubic units.

Answer: 125 cubic units



REMEMBER

Rectangular prism: six faces in three pairs. Triangular prism: five. General: $SA = 2B + Ph$, two bases plus the band around the outside. Surface area is in square units; volume in cubic.



FAMILY CORNER

No need to remember this math yourself! Ask your student to teach you Mr DJ's example, then try the first Mild problem together.



MILD

Tan the Turtle: Slow and steady. Warm up!

1 Find the surface area of a box 7 by 5 by 2.

Answer

2 Find the volume of that box.

Answer

**OOPS ALERT**

Careful on #1! The slip Mr DJ sees most: Answered 59 by counting three faces.

**MEDIUM**

Digit the Fox: Stretch your brain.

- 3** Find the surface area of a cube with edge 5.

Answer

- 4** A triangular prism has ends with base 6 and height 4, is 7 long, with side lengths 5, 5 and 6. Find its surface area.

Answer

**SPICY**

Blaze the Dragon: Bring the heat!

- 5** How many faces does a prism with a hexagonal base have? Explain your rule.

Answer

- 6 Use $SA = 2B + Ph$ on the box in question 1 and show it matches.

Answer



EXTRA SPICY

Pi the Owl: Big-brain challenge.

- 7 A box is to be gift-wrapped and also filled with sand. Which calculation do you need for each, and what units will each answer have?

Answer



How did this sheet feel?



Easy for me



Just right



Made me think

Stuck? Watch Mr DJ explain it

"Surface Area of Prisms — Step by Step Guide" on YouTube:
[youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

Three new math puzzles every day, free:
puzzles.mathwithmrdj.com