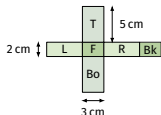


Start Tasks — Answers



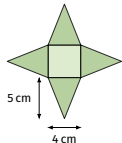
1. Which single face on this net is congruent to the Top (T) face?



Solution

The Bottom (Bo) face.
It is opposite the Top (T).

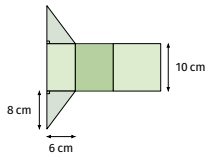
3. This net folds into a square-based pyramid. What is the area of the square base?



Solution

Base is 4×4 :
 $A = 16 \text{ cm}^2$.

2. This net folds into a triangular prism. What is the area of one triangular end face?



Solution

Legs 6 and 8:

$$A = \frac{1}{2} \times 6 \times 8 \\ = 24 \text{ cm}^2.$$

4. A cuboid net has three pairs of congruent rectangles. Explain why a cuboid always has exactly 3 pairs of identical faces.

Solution

A cuboid has 3 pairs of opposite faces (front/back, left/right, top/bottom), and opposite faces are always identical.

Start Tasks — Answers



5. Draw an accurate net for a cuboid 6 cm long, 4 cm wide, and 3 cm high, labelling every face with its dimensions.

Solution

A band of four rectangles 6×3 , 4×3 , 6×3 , 4×3 , with a 6×4 top and bottom; label each face.

7. A square-based pyramid net has a base of side 6 cm and four congruent triangular flaps with slant height 8 cm. Draw this net to scale.

Solution

A 6×6 square base with four congruent triangles (base 6 cm, slant height 8 cm) on its four edges.

6. Draw a net for a triangular prism with a 5 cm base, 12 cm height, and 15 cm length.

Solution

Three rectangles 5×15 , 12×15 , 13×15 in a row, plus two right-triangle caps (legs 5, 12; hyp 13).

8. Two different students draw two different-looking nets for the same cube. Explain how both can be correct.

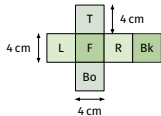
Solution

Both use six equal squares that fold up with no gaps or overlaps; only the layout differs (e.g. cross vs staircase).

Start Tasks — Answers



9. Find the total area of all 6 faces shown in this net.



Solution

Each face $4 \times 4 = 16$.
 $6 \times 16 = 96 \text{ cm}^2$.

11. A cardboard box maker draws the net of a cuboid 12 cm by 7 cm by 4 cm before cutting it out. Why is drawing the net first useful?

Solution

It shows exactly how much card is needed and how the faces connect, so material is not wasted and the box folds together correctly.

10. A cuboid measures 8 cm by 5 cm by 3 cm. List the area of each of the 3 different-sized rectangular faces in its net.

Solution

$8 \times 5 = 40$, $8 \times 3 = 24$, $5 \times 3 = 15 \text{ cm}^2$ (each appears twice).

12. Sketch two different valid nets that both fold into the same cube.

Solution

Any two different layouts of six equal squares that fold up cleanly, e.g. a cross shape and a staircase (zig-zag).