

ANSWERS

AREA OF TRAPEZOIDS

Instructions: Calculate the area of the Trapezoids in different everyday situations.

Exercise 1: The Popsicle

Juanito drew a popsicle in his notebook in the shape of a trapezoid, which has a larger base of 4 cm, a smaller base of 2 cm, and a height of 3.5 cm.

Question: What is the area of the drawing of the popsicle?

Solution:

$$\begin{aligned} \text{Area} &= (4 \text{ cm} + 2 \text{ cm}) * 3,5 \text{ cm} / 2 \\ &= 6 \text{ cm} * 3,5 \text{ cm} / 2 \\ &= 21 \text{ cm}^2 / 2 \\ &= 10,5 \text{ cm}^2 \end{aligned}$$



Exercise 2: The Bucket

Grandmother uses a bucket with a base in the shape of a trapezoid to collect rainwater. The larger base is 31 cm, the smaller base is 25 cm, and the height is 19 cm.

Question: What is the area of the base of the bucket?

Solution:

$$\begin{aligned} \text{Area} &= (31 \text{ cm} + 25 \text{ cm}) * 19 \text{ cm} / 2 \\ &= 56 \text{ cm} * 19 \text{ cm} / 2 \\ &= 1064 \text{ cm}^2 / 2 \\ &= 532 \text{ cm}^2 \end{aligned}$$



Exercise 3: The Perfume

The perfume that my sister uses has a sticker with her name in the shape of a trapezoid, which has a larger base of 6 cm, a smaller base of 4 cm, and a height of 5 cm.

Question: What is the area of the perfume's sticker?

Solution:

$$\begin{aligned} \text{Area} &= (6 \text{ cm} + 4 \text{ cm}) * 5 \text{ cm} / 2 \\ &= 10 \text{ cm} * 5 \text{ cm} / 2 \\ &= 50 \text{ cm}^2 / 2 \\ &= 25 \text{ cm}^2 \end{aligned}$$



How Did You Do? 😊 😐 😞