

Jakarta International<br>School<br>$6^{\text {th }}$ Grade<br>Practice test-Formative<br>Area and Volume- Green

Name: $\qquad$

Date: $\qquad$

Score: $\overline{26}$

## Area of Triangles and Parallelograms:

1) The mainsail on a yatch is made in the shape of a triangle. What is the area of the sail on Mr. McMullen's little optimist dinghy if the base is 2 meters and the height is 2.8 meters (2pts)

2) Ms. Strydhorst-Piers is making a quilt by stitching together pieces of fabric that are all the same size and shaped like a parallelogram. Each piece of fabric has a base of 12 cm , side of 9 cm and height of 11 cm . She uses 30 pieces of fabric to make the quilt.
a. Find the area of one piece of fabric. (2pts)
b. Find the area of her finished quilt. (2pts)
3) Find the area of the following figures. (3pts each)


21 m

AREA:


AREA:
4) The new car parks at Carrefour have been made in the shape of a parallelogram. Each parking space is 4.2 meters long and has an area of $10.5 \mathrm{~m}^{2}$. How wide is each parking space? (2pts)

## Surface Area:

5) The wrapping paper you have to cover a birthday gift measures $40 \mathrm{~cm} \times 60 \mathrm{~cm}$. You want to wrap a box that is 14 cm by 6 cm by 3 cm . Answer the questions and work out if you have enough wrapping paper:
a. What is the area of the wrapping paper? (2pts)
b. What is the surface area of the box? (Measurements are in centimeters.) (3pts)

c. Do you have enough paper? Explain why or why not. (1pt)

## Volume of Prisms:

6) A rectangular swimming pool has sides measuring 8 m by 5 m . The depth is 6 m and is the same everywhere. Find the volume of the swimming pool. (2pts)
7) Justin's mother loves to make Christmas cake. Last year, she made a cake in the shape of a rectangular prism and asked Justin to measure the cake and write down the dimensions so that she could order a box to put it in. He told her that the height of the cake was 5 cm , the width was 12 cm and the volume was $720 \mathrm{~cm}^{3}$.

Calculate the length of the cake for Justin. (2pts)
8) Justin's mother made a smaller cake for his grandmother. The length, width and height were all 5 cm .
a. Calculate the volume of the cake. (1pt)
b. What is the shape of the cake? (1pt)

