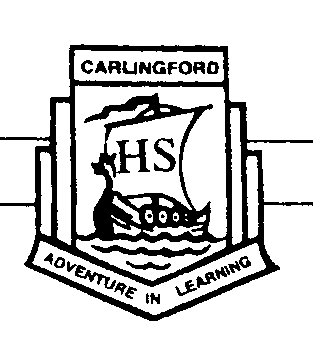
**Carlingford High School**



**Mathematics**

**Year 9 (5.1) Term 2 Exam**

**2017**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Time allowed: 55 minutes*

* Answer all questions in the spaces provided.
* Marks may be deducted for careless or untidy work.
* Complete the examination in blue or black pen.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Topic** | **The Metric System** | **Perimeter** | **Area** | **Volume** | **Total** |
| **Mark** | **/10** | **/13** | **/20** | **/7** | **/50** |

**The Metric System**

**Question 1**

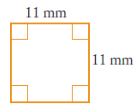
Convert:

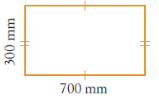
1. 9km = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m
2. 6.4m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm
3. 300 hours = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ days
4. 75cm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m
5. 240mm = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm
6. 8.65 tonnes = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kg
7. 4 years = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ months
8. 4900L = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kL
9. 2.03km = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm
10. = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Perimeter**

**Question 2**

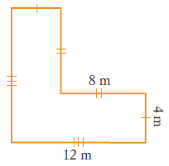
Find the perimeter of each shape:

Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_ cm



Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

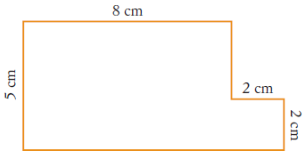
 Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_ cm



Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m

**Question 3**

Write in the two missing side lengths then calculate the perimeter.



Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

**Question 4**

1. A square has perimeter 51cm. Find the length of one side.

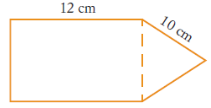
Length = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

1. A rectangle has a perimeter of 40cm. If its length is 12cm, find its width.

Width = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

**Question 5**

This shape is made up of a rectangle and an equilateral triangle.

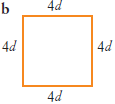


Find its perimeter.

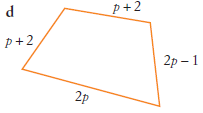
Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cm

**Question 6**

Write a simplified expression for the **perimeter** of each shape.



Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

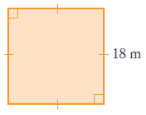


Perimeter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

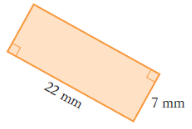
**Area**

**Question 7**

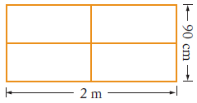
Find the area of each shape:



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

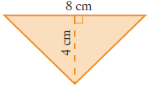
**Question 8**

A square has an area of . What is the length of one side?

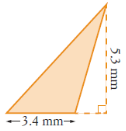
Length = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 9**

Find the area of each triangle.

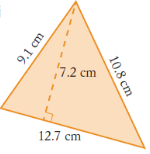


Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

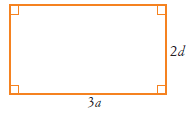
(c)



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

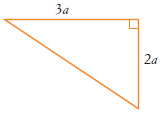
**Question 10**

Write a simplified expression for the **area** of each shape.



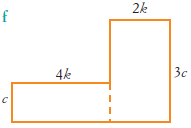
Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b)



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(c)



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

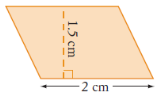
**Question 11**

A rectangle has a width of and an area of . What is its length?

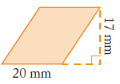
Length = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m

**Question 12**

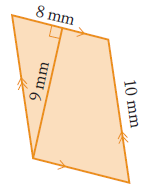
Find the area of each parallelogram.



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



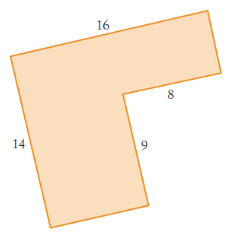
Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



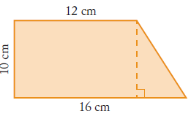
Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 13**

Find the area of these **composite shapes**.



Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

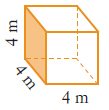


Area = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

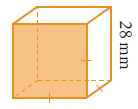
**Volume**

**Question 14**

Find the **volume** of each prism.

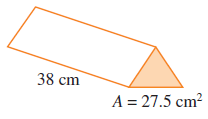


Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(c)



Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Question 15**

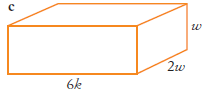
The volume of a prism is .

Write possible values for the area of the base and the height of the prism.

1. Area of base = \_\_\_\_\_\_\_\_\_\_\_\_
2. Height of prism = \_\_\_\_\_\_\_\_\_\_\_\_\_ cm

**Question 16**

Write a simplified expression for the **volume** of this solid.



Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**END OF TEST**