



## Practice Test

### U13 & 14 – Ratio, Proportion, Area & Perimeter



**Question 1 (4 points) – Complete ratio and proportion questions below.**

A basket held six green apples and seven red apples. What is the.....?

Note: Questions are not drawn to scale.  
Use dimensions given.

- a) Ratio of green apples to red apples
- b) Ratio of red apples to green apples
- c) The proportion of green apples
- d) The proportion of red apples

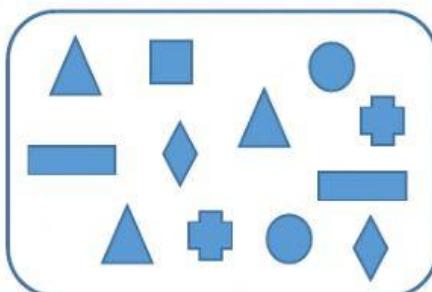
  
  
  


**Question 2 (4 points) – A class had 15 girls and 14 boys. What is the....?**

- a) Ratio of boys to girls
- b) Ratio of girls to boys
- c) The proportion of girls
- d) The proportion of boys


**Question 3 (4 points) – Use the diagram below to answer the question**



- a) What is the ratio of squares to triangles?
- b) What is the ratio of triangles to circles to rectangles?
- c) What is the proportion of circles?
- d) What is the proportion of triangles?

**Question 4 (5 points) – A bag contains only oranges, bananas and pears. There are 6 pears.**

- a) The ratio of pears to bananas was 2:1. How many bananas were there?
- b) The proportion of oranges was  $1/10$ . How many oranges was there?

c) What was the ratio of bananas to oranges to pears?

d) What was the proportion of pears?

e) How many items were there in total?

**Question 5 (5 points)** – The recipe below makes enough for 3 people. If I have 12 people coming for dinner, how much of each ingredient should I buy?

Ingredient	3 people	12 people
Rice	200g	g
Prawns	9 prawns	prawns
Tomatoes	4 tomatoes	tomatoes
Ginger	8.5g	g
Fish	325g	g



**Question 6 (2 points)** – A boy has a model plane that is a ratio of 1:80 compared to the real plane?

If the real plane is 80 meters long and 20 meters wide, what is the .....?

a) Model Length  m

b) Model Width  m

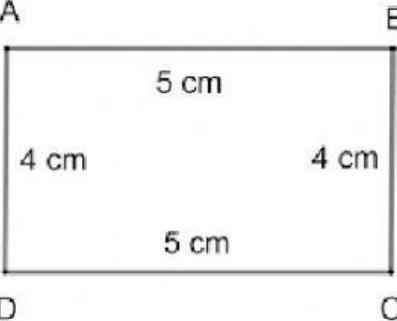
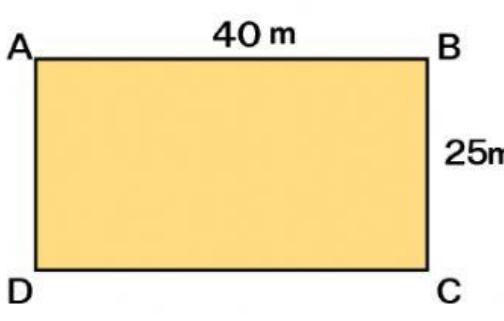
**Question 7 (2 points)** – A girl has a model car that is a ratio of 1:200 compared to the real car?

If the model is 20 cm long and 10 cm wide, what is the .....?

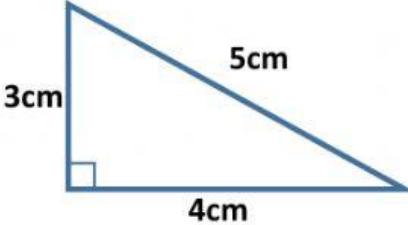
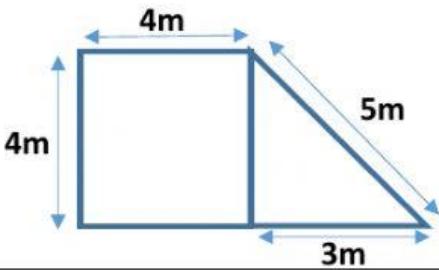
a) Real length  cm

b) Real width  cm

**Question 8 (4 points) – Calculate the Area and Perimeter of the shapes below**

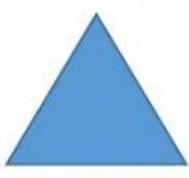
<b>Shape</b>		
<b>Area</b>	cm <sup>2</sup>	m <sup>2</sup>
<b>Perimeter</b>	cm	m

**Question 9 (4 points) – Calculate the Area and Perimeter of the shapes below**

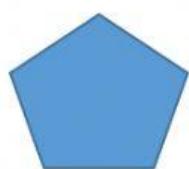
<b>Shape</b>		
<b>Area</b>	cm <sup>2</sup>	m <sup>2</sup>
<b>Perimeter</b>	cm	m

**Question 10 (2 points) – Calculate the perimeter of the regular shape below. Each side is 3 meters.**

**Perimeter:**



m

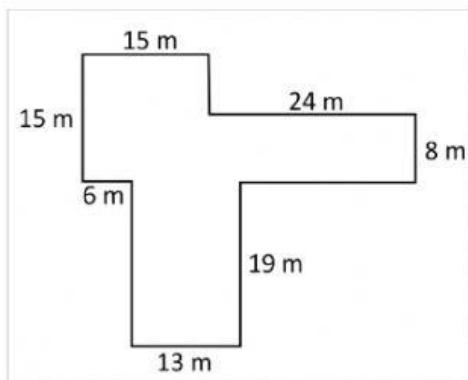


m



m

**Question 11 (2 points) – Calculate the perimeter of the regular shape below.**



Perimeter =  m

**Question 12 (4 points) – A farmer has a rectangular field where he grows rice. The dimensions of the farm are 32m long and 45m wide.**

a) How many meter of fencing does he need to put around the field?  m

b) If fencing costs \$3 per meter, how much will it cost? \$

c) What is the area of his field?  m<sup>2</sup>

d) If he can get \$2 per meter square of rice, how much money can he make? \$

