N5 SPTA N5 Homework Similarity (B)

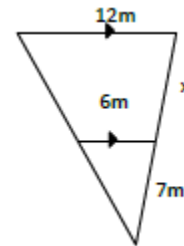**Show all working – <u>NO</u> Calculator allowed unless stated.**

1. Calculate the value of x in each of the following:

a)

5cm

6cm
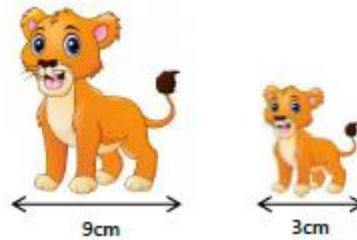
15cm

x

(b)

12m

6m   x

7m
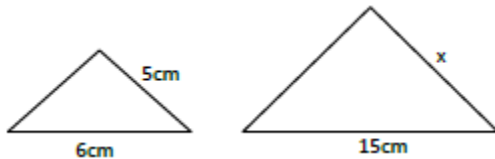
(6)

2. The following images are mathematically similar. The area of the larger picture is 117cm^2 Calculate the area of the smaller picture.

9cm

3cm

(3)

3. A company rents out skips.

The cost is based on the volume of the skip.

The rental price for the small skip is £80.
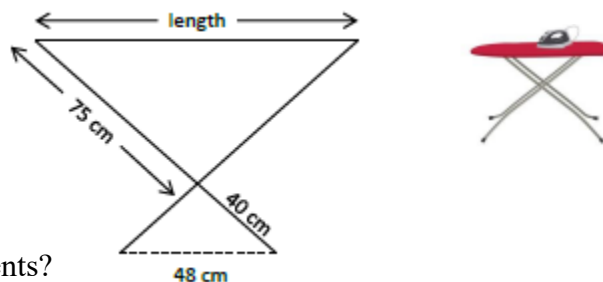
How much would it cost to hire the large skip?

140cm

100cm

(3)

4. Robert wants to order an ironing board that is at least 80cm in length.

When the following board is set up two similar triangles are formed.

Does this board meet Robert's requirements?

length

75 cm

40 cm

48 cm

(3)

Total Marks: 15