Name:

Quiz: Equivalent Figures

1. The Brown family is considering purchasing a freezer. They learn that there are two equivalent varieties sold at a nearby furniture store. The length of the upright is 90 cm.

The length of the chest is $1\frac{1}{2}$ times the length of the upright.

The height of the chest is 4 cm more than twice its width.

The height of the upright is $2\frac{3}{5}$ times the width of the chest. The width of the upright is 44 cm less than the height of the chest.

How much greater is the width of the upright compared with the width of the chest?

Upright Freezer



Ans:	
------	--

2. A water park has an adult pool and a baby pool. These pools hold equivalent volumes of water. The baby pool is 50cm deep and the adult pool is four times as deep as the baby pool. The length of the adult pool is 2.5X the width of the baby pool. The baby pool is 4000cm longer than the adult pool. The width of the adult pool is half its length. By how many centimeters does the width of the adult pool exceed the width of the baby pool?

Adult Pool



Baby Pool



3. Rectangle PQOR cuts triangle MNO as shown in the figure below:

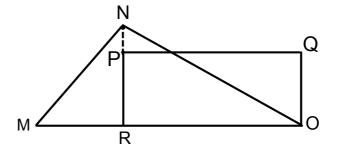
Side MO is 10cm long.

Side OR is 4cm longer than side PR.

Altitude NR of the triangle, formed by extending side RP, is 1cm longer than side RF Triangle MNO and rectangle PQOR are equivalent.

What is the measure, in centimetres, of altitude NR of triangle MNO?

Round off your answer to the nearest hundredth. Clearly show all your work.



Ans: