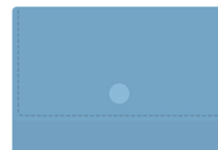


Formulae

7. The price for a design to be printed on a bag varies, depending on the number of colours used.

The formula below is used to calculate the cost of the printing service:

$$\text{Price} = \text{£}1.54 \times \text{number of colours} + \text{£}2.02$$



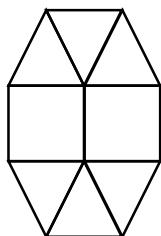
An extra 10% is then added to the final cost of the service.
What is the total price for printing a design that includes 7 colours?



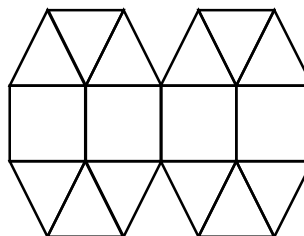
VF
HW/Ext

8. Sarah is creating designs using two different shapes.

She gives each shape a value.



$$\text{Total value} = 12$$



$$\text{Total value} = 24$$

The formula to create the shapes is always 6 triangles + 2 squares, written $6t + 2s$.

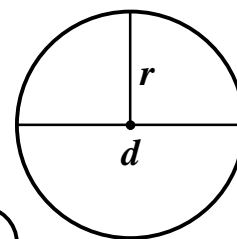
If $s = 0.75$, what is the value of t ?



VF
HW/Ext

9. Hector is trying to work out the radius of the circle shown.

The circumference of the circle is a whole number less than 24cm.



Not to scale

He says,



The formula to work out the radius of a circle is
 $r = \text{circumference} \div (2 \times 3.14)$

The radius of the circle could be 3.8cm when rounded to 1 decimal place.

Is Hector correct? Explain why.



RPS
HW/Ext