02/03/21

Q1.

$$x + 2y = 20$$

x and *y* are whole numbers **less than 10**

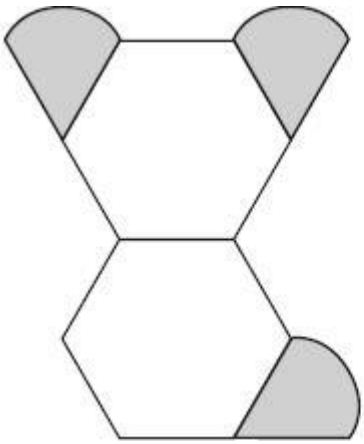
What could ***x*** and ***y*** be?

x =

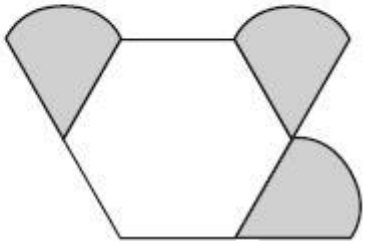
y =

Q2. Amina is making designs with two different shapes.

She gives each shape a value.

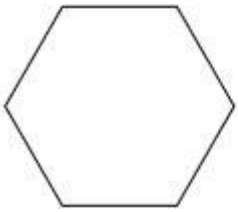


Total value is 147



Total value is 111

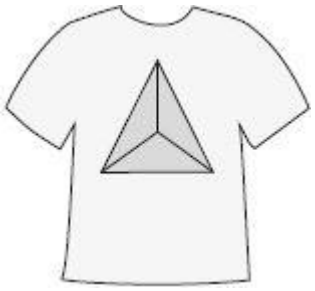
Calculate the value of each shape.



=

=

Q3. A shop prints designs on T-shirts.



They use this formula to work out the price for printing a design.

price = 60p × number of colours + £1.25

What is the price for printing a design that has **3** colours in it?

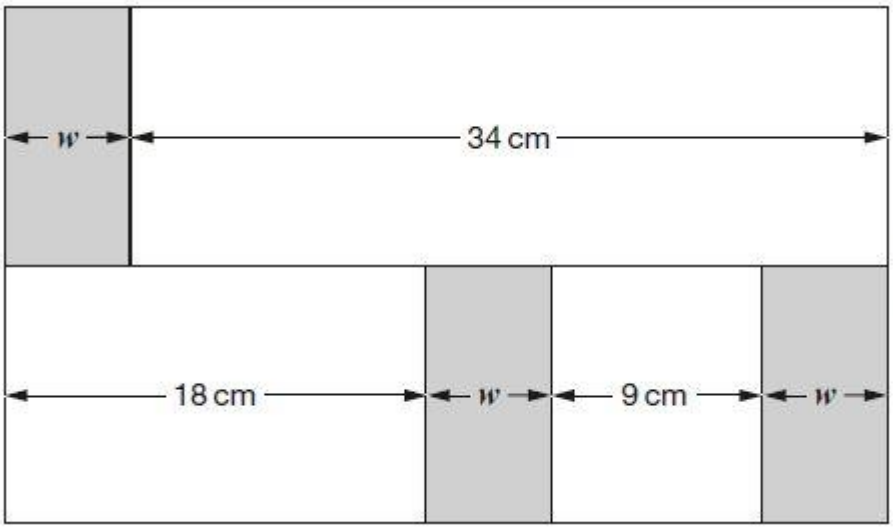
£

Amina has **£5** to spend on printing a design.

What is the greatest number of **colours** she can have in the design?

colours

Q4. In this diagram, the shaded rectangles are all of equal width (***w***).



Not to scale

Calculate the width (***w***) of one shaded rectangle.

cm

Q5. Here is a pattern of number pairs.

a	*b*
1	9
2	19
3	29
4	39

Complete the **rule** for the number pattern.

$b =$ ☐ $\times a -$ ☐