

EAST PRESTON ISLAMIC COLLEGE
Year 9 Holiday Homework End of Term 2

DUE: Monday, First week of Term 3, 2018

Have a safe and wonderful time on your Holidays!!!!

From your Year 9 Maths Teachers.

ALGEBRAIC EQUATIONS

$$x = Y$$

$$W = x + Z$$

$$Z = a + Y$$

1. If $x = 25$ and $W = 125$ then find the value of a

2. $xyz = 1$

$$x = 100 \text{ and } y = 50$$

Find the value of z .

3. $ab = rs$

$$a = 50, r = 20, b = 100$$

Find the value of s

4.
$$P = \frac{h + w}{2}$$

If $P = 25$ and $w = 34$, find the value of h .



5. $R = \frac{n(n-3)}{2}$ $S = n^2 + n$

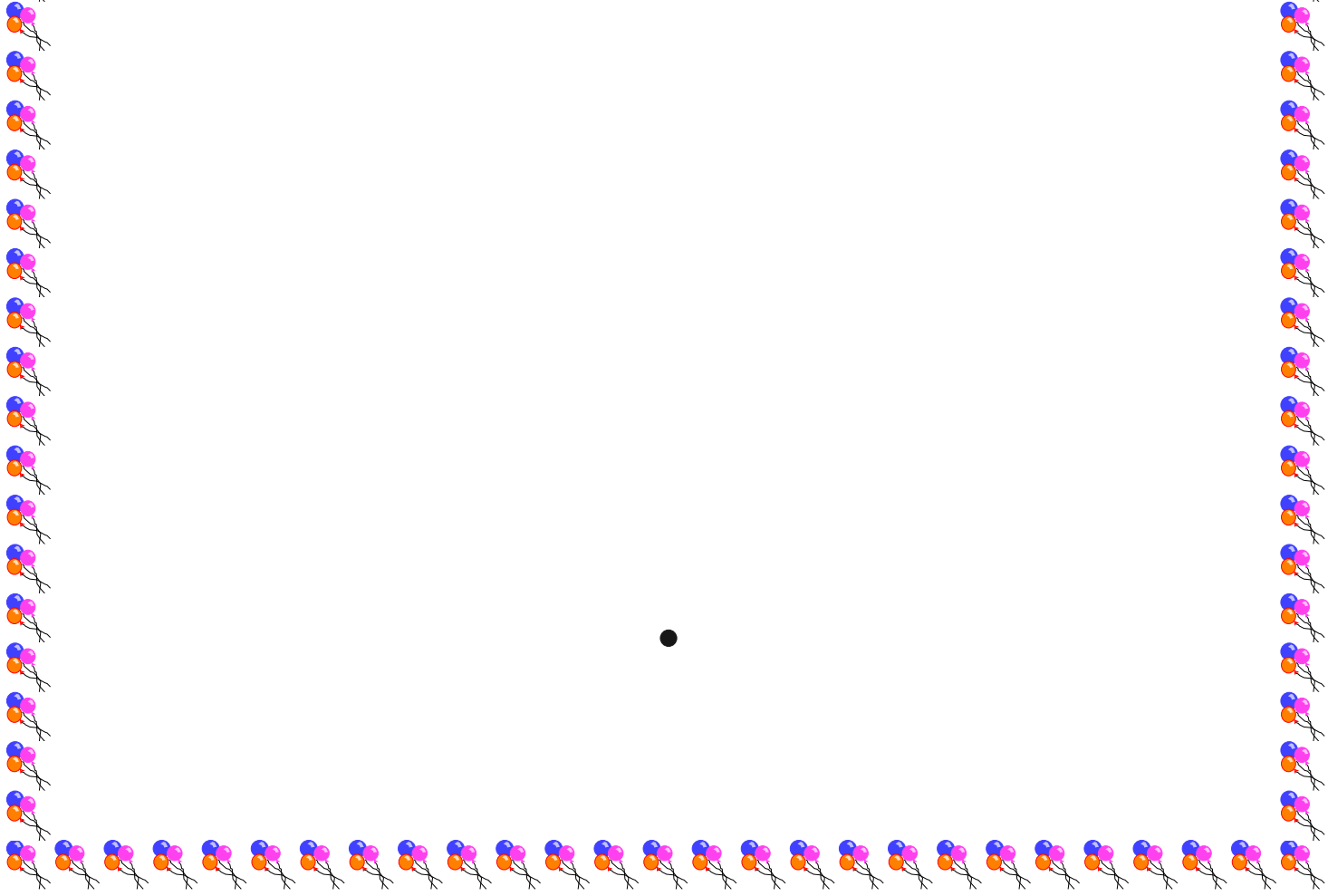
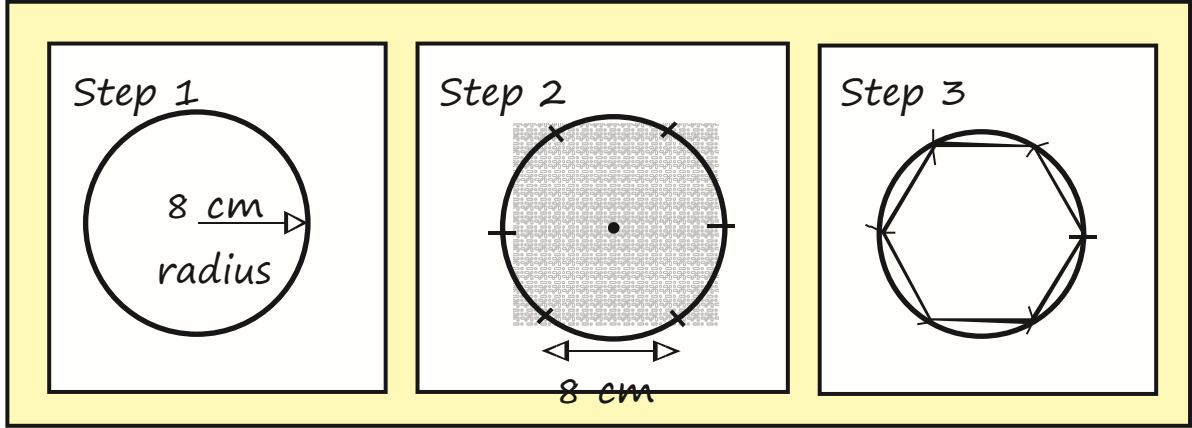
If $n = 10$, find the value of $R + S$

DRAWING POLYGONS

For this exercise you will need a pencil, ruler and compass.

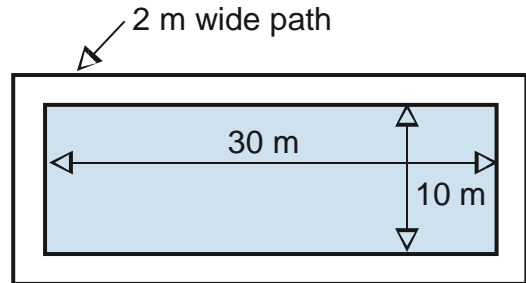
Draw a regular hexagon with sides 8 cm.

The steps are illustrated in the diagram below.



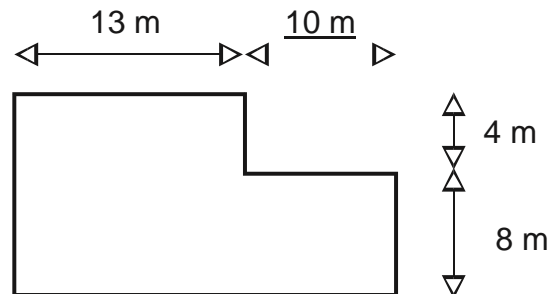
AREA APPLICATIONS

1. A swimming pool with dimensions $30\text{ m} \times 10\text{ m}$ is surrounded by a brick path 2 m wide. Calculate the area of the path.



The Rolled Turf company sells rolls of readymade lawn. The rolls are 0.8 m wide and 2 m long. The plan below shows a section that needs to be covered in turf.

2. Calculate the area of the section.



3. How many rolls of turf are needed to cover the section?

4. Turf costs $\$18$ per roll. How much will it cost to complete the job?

Find all the missing angles.

