

REVISION: NUMBER PATTERNS, EQUATIONS & INEQUALITIES

24 MARCH 2014



Lesson Description

In this lesson we revise:

- Number Patterns
- Solving Equations
- Solving Inequalities



Improve your Skills

Number Patterns

Question 1

Determine the general term of the following sequence and term twenty five.

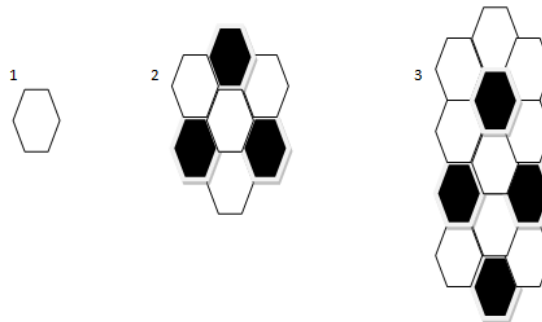
6; 12; 18

Question 2

You would like to start saving money in your piggy bank, but because you have never tried to save money before, you decide to start slowly. At the end of the first week you save R 5. Then at the end of the second week you save R 10 and at the end of the third week, R 15. In which week will you save R 50?

Question 3

Look at this pattern of hexagons and determine how many hexagons there will be in the tenth pattern.



Solving Equations

Question 1

Solve for x:

$$\frac{2x+1}{x} + \frac{2x}{2x-1} = 3$$

Question 2

Find the values of x & y if:

$$3x + y = 2 ;$$

$$6x - y = 25$$

Solving Inequalities

Question 1

Solve for x and illustrate your answer on a number line:

a.) $x + \frac{x}{3} < 11 - \frac{x}{2}$

b.) $3y - \frac{4y+4}{16} > \frac{3(y-1)}{4}$

Question 2

Solve for x and give your answer in interval notation:

$$-3 \leq -2x + 3 < 11, x \in \mathbb{R}$$