



Year 8 Weekly Tutorial - 02

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- Find first 4 terms of the following sequences if n^{th} term is,
 - $3n^2 - n$
 - $2n^2 - 3n + 5$
- Expand and simplify.
 - $3(x - 4)(x + 5)$
 - $\left(\frac{2}{x} - x\right)\left(x - \frac{1}{x}\right)$
- Solve the following inequalities and show the solutions on the number line.
 - $\frac{3x-5}{-2} \leq 5 - x$
 - $-3(x - 7) > 12 - 2x$

4. Solve;

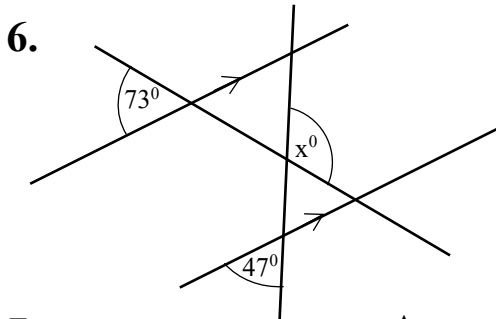
$$\frac{a}{3} - \frac{b}{5} = \frac{7}{15}$$

$$\frac{a}{5} + \frac{b}{7} = \frac{3}{7}$$

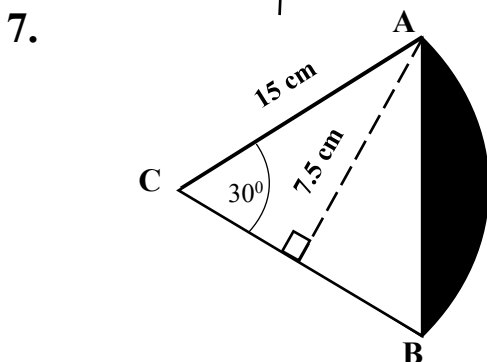
5. Simplify the following.

- $(3x^2y^3)^2 \times x^{-2}y^3$

- $\frac{64a^5b^3}{16a^3b} \times \frac{a^7}{b}$



- Find angle x° .
- Give all reasons for your answer.



Find the shaded area correct to 1 dp.
(ABC is a sector with radius 15 cm)

- Draw the graph of the following straight lines in the interval $-1 \leq x \leq 2$
(Find suitable two point on the line.)
 - $y = 5 - 2x$
 - $y = \frac{3}{2}x + 3$