



Year 08 Weekly Tutorial - 12

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1. Factorize the following quadratic expressions.

a) $2x^2 - 3x$

c) $x^2 - x - 56$

e) $6x^2 - 5x - 6$

b) $x^2 - 81$

d) $2x^2 - 5x - 12$

2. Solve the following quadratic equations by factorization.

a) $x^2 - 25 = 0$

c) $3x^2 - 5x - 2 = 0$

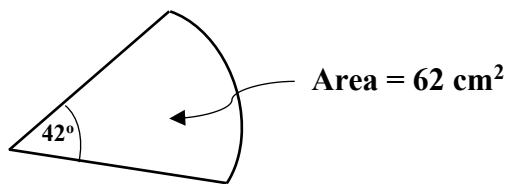
b) $2x^2 - 4x = 0$

d) $2x^2 - 3x - 5 = 0$

3. Solve;

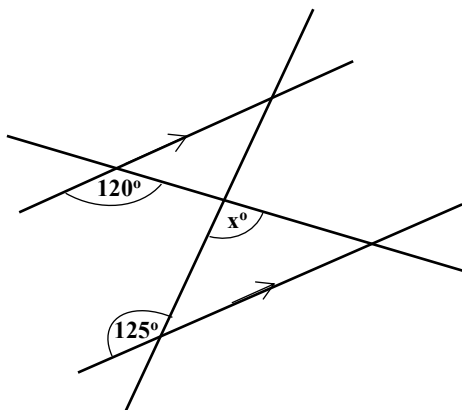
$$\begin{aligned} 7x + 3y &= 5 \\ 3x - 2y &= 8 \end{aligned}$$

4.



Find the radius of the sector correct to 1dp.

5.



a) Find x° .

b) Write all reasons for your answer.

6. Draw the graph of the following functions.

a) $y = x^2 + 2x - 3$, $-3 \leq x \leq 3$

b) $y = -2x^2 - 3x + 9$, $-5 \leq x \leq 3$

Note – you have to use graph papers.