



GCSE – Year 10

Weekly Tutorial - 03

1. Simplify;

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

b) $3\sqrt{\frac{8x^{12}}{y^9}}$

2. Factorize;

a) $x^2 - 5x - 14$

b) $7x^2 - 38x + 15$

3. Rationalize the denominator.

a) $\frac{2\sqrt{5}}{(2-3\sqrt{5})(3-\sqrt{5})}$

b) $\frac{2\sqrt{3}+2}{\sqrt{3}(2\sqrt{3}-3)}$

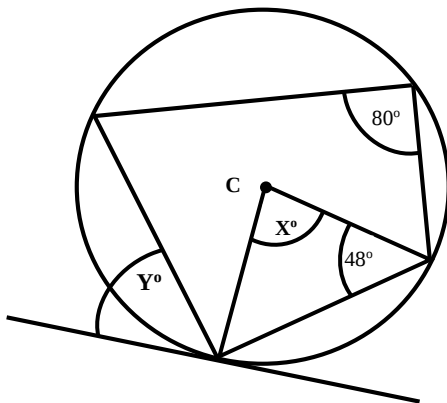
4. Solve; $25 - \sqrt{75}x = \sqrt{3}x + 13$

5. Solve;

$$5x + 3y = 7$$

$$3x - 5y = 5$$

6.



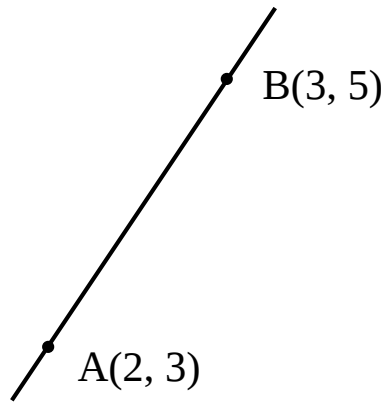
C is the centre of the circle.

Find the angles x° and y° .

7. Find the gradient and y – intercept of the equation of a straight line;

$$3y - 2x + 5 = 0$$

8.



Find the equation of the straight line which passes through point A(2, 3) and B(3, 5).