## Essential Skills 2

The skills in this series of worksheets appear frequently.
These are the GIFTS you must take to succeed
Equation of a Perpendicular Bisector (Non Calculator)
Find the equation of the perpendicular bisector of the line joining each pair of points:

1. $A(4,0)$ and $B(2,6)$
2. $A(-1,-4)$ and $B(-3,4)$
3. $A(-1,-3)$ and $B(-7,-1)$
4. $A(4,7)$ and $B(10,1)$
5. $A(2,-1)$ and $B(8,3)$
6. $\mathrm{A}(-4,3)$ and $\mathrm{B}(-2,1)$
7. $A(9,8)$ and $B(3,2)$
8. $A(-5,4)$ and $B(3,-2)$
9. $A(3,-2)$ and $B(-7,-6)$
10. $\mathrm{A}(-3,2)$ and $\mathrm{B}(-3,8)$

## APPLYING QUESTION

$A$ is the point $(-5,-1), B$ is $(3,3)$ and $C$ is $(4,-4)$ in triangle $A B C$
(a) Find the equation of the perpendicular bisector of the line $A B$
(b) Find the equation of the perpendicular bisector of the line AC
(c) Find the point of intersection of these perpendicular bisectors.

