

## Essential Skills 29

The skills in this series of worksheets appear frequently.

These are the GIFTS you must take to succeed



### Angle between a Line and the $x$ -axis

Calculate the size of the angle of the line connecting each pair of points and the positive direction of the  $x$ -axis:

1.  $A(3,2)$  &  $B(7,6)$
2.  $C(5,0)$  &  $D(3,-4)$
3.  $E(-1,3)$  &  $F(3,5)$
4.  $G(-2,6)$  &  $H(4,0)$
5.  $I(7,2)$  &  $J(2,4)$

Calculate the gradient of the line given the angle it makes with the positive direction of the  $x$ -axis:

6.  $50^\circ$
7.  $37 \cdot 5^\circ$
8.  $13^\circ$
9.  $123 \cdot 1^\circ$
10.  $116 \cdot 6^\circ$



### APPLYING QUESTION

The diagram shows the lines  $y = 3x$  and  $y = 7 - x$ .

Calculate the size of angle  $x^\circ$

