Find the equation of a straight line through two given points

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Maths

## Find the equation of a straight line through two given points

1. Find the equation of the straight line through point $A$ and $B$.

2. Find the equation of the straight lines that pass through these points.
a) $(2,5)$ and $(4,15)$
b) $(4,10)$ and $(7,1)$
c) $(-5,4)$ and $(-3,1)$
d) $(-10,-5)$ and $(-7,4)$
e) The origin and $(4,-2)$
3. Does the point $(7,9)$ lie on the line that passes through the points $(10,2)$ and $(5,12)$ ?

## Answers

## Find the equation of a straight line through two given points

1. Find the equation of the straight line through point $A$ and $B$.

2. Find the equation of the straight lines that pass through these points.
a) $(2,5)$ and $(4,15)$

$$
y=5 x-5
$$

b) $(4,10)$ and $(7,1)$
$y=-3 x+22$
c) $(-5,4)$ and $(-3,1)$
$y=-1.5 x-3.5$
d) $(-10,-5)$ and $(-7,4) \quad y=3 x+25$
e) The origin and $(4,-2) y=-0.5 x$
3. Does the point $(7,9)$ lie on the line that passes through the points $(10,2)$ and $(5,12)$ ? No it doesn' lie on the line $y=-2 x+22$

