

Maths

# Work Out the Gradient of a Line Perpendicular to a Given Line

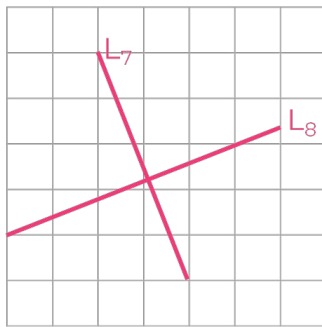
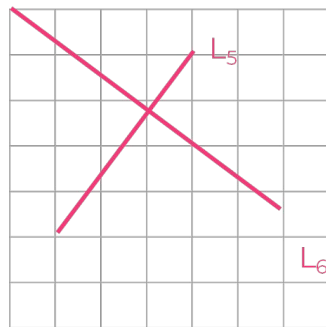
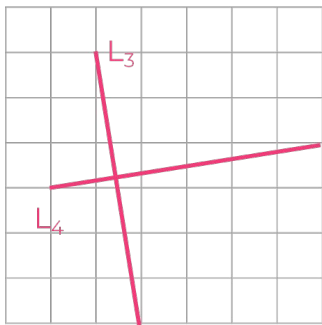
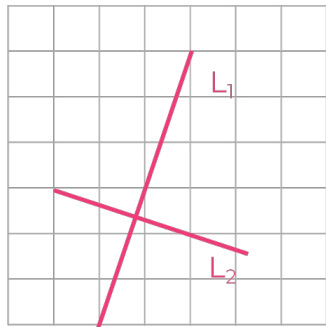
Miss Davies

**Please note some slides do have colour font on them**



# Find the gradient of perpendicular line

1. Work out the gradient of each line



2. Find the gradient of a line that is perpendicular to each of the following:

a)  $y = 4x + 8$

b)  $y = 10 - 9x$

c)  $y = 12 + \frac{1}{3}x$

d)  $y - 3 = -\frac{1}{2}x$

e)  $3y = 4x + 5$

f)  $2y - x = 0$

g)  $2x - \frac{1}{4}y + 5 = 1$

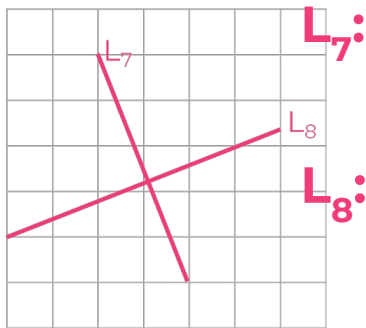
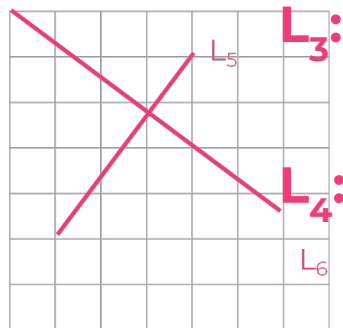
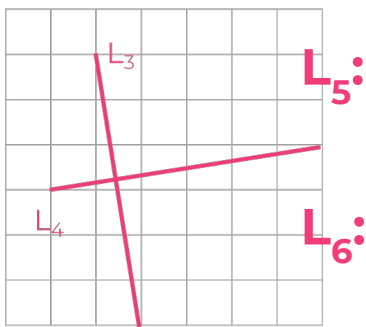
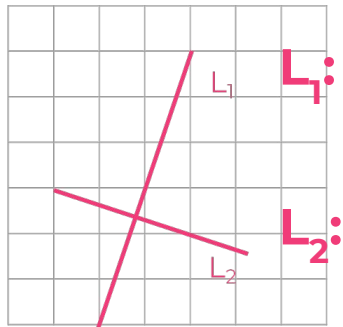


# Answers



# Find the gradient of perpendicular line

1. Work out the gradient of each line



2. Find the gradient of a line that is perpendicular to each of the following:

a)  $y = 4x + 8$       a)  $-\frac{1}{4}$

b)  $y = 10 - 9x$       b)  $\frac{1}{9}$

c)  $y = 12 + \frac{1}{3}x$       c)  $-3$

d)  $y - 3 = -\frac{1}{2}x$       d)  $2$

e)  $3y = 4x + 5$       e)  $-\frac{3}{4}$

f)  $2y - x = 0$       f)  $-2$

g)  $2x - \frac{1}{4}y + 5 = 1$       g)  $-\frac{1}{8}$

