Find the equation of the line that is parallel to:

a)
$$y = -\frac{1}{7}x + 5$$
 passing through (0,3)

d)
$$y = -\frac{1}{5}x + 3$$
 passing through (0,4)

b)
$$y = 3x - 6$$
 passing through (0, 2)

e)
$$y = \frac{1}{2}x - 3$$
 passing through (0, 7)

c)
$$y = -\frac{1}{5}x + 7$$
 passing through (0, -3)

f)
$$y = 3x + 1$$
 passing through (0, -4)

Find the equation of the line that is parallel to:

g)
$$y = 3x + 4$$
 passing through (1,6)

h)
$$y = 2x + 3$$
 passing through (3,0)

i)
$$y = -x + 5$$
 passing through (4, -7)

j)
$$y = -4x + 3$$
 passing through (-1,9)

Find the equation of the line that is perpendicular to:

k)
$$y = -\frac{1}{5}x + 5$$
 passing through (10,22)

I)
$$y = \frac{1}{3}x - 3$$
 passing through (2, -8)

m)
$$y = -\frac{1}{4}x + 4$$
 passing through (2, 12)

Exam question:

A straight line, L, passes through the point with coordinates (4, 4) and is perpendicular to the line with equation y=2x+3. Find an equation of the straight line L

