

Graph each pair of lines on the same number plane and find where they intersect.

1 $y = x + 2$ and $x + y = 2$

2 $y = 2x$ and $y = x + 1$

3 $x + y = 5$ and $x - y = 1$

4 $2x - y = 1$ and $x + y = 5$

5 $y = -x$ and $y = x + 4$

6 $y = x - 1$ and $y = 2x$

7 $y = 4x$ and $y = x + 3$

8 $x - y = 2$ and $x + y = 4$

9 $y = -3x$ and $y = x + 4$

10 $y = x - 3$ and $y = -2x$

3 Solve each of the following pairs of equations by graphical means. All solutions are integral (ie they are whole numbers).

a $x + y = 1$
 $2x - y = 5$

b $2x + y = 3$
 $x + y = 1$

c $x - y = 3$
 $2x + y = 0$

d $3x - y - 2 = 0$
 $x - y + 2 = 0$

e $3a - 2b = 1$
 $a - b = 1$

f $p + 2q = 2$
 $p - q = -4$

g $3a + 2b = 5$
 $a = 1$

h $p = 6$
 $p - q = 4$

4 Solve each pair of simultaneous equations by the graphical method. (Use a scale of 1 cm to 1 unit on each axis.)

a $y = 4x$
 $x + y = 3$

b $3x - y = 1$
 $x - y = 2$

c $x = 4y$
 $x + y = 1$

5 Estimate the solution to each of the following pairs of simultaneous equations by graphing each, using a scale of 1 cm to 1 unit on each axis. Give the answers correct to 1 decimal place.

a $4x + 3y = 3$
 $x - 2y = 1$

b $x - y = 2$
 $8x + 4y = 7$

c $4a - 6b = 1$
 $4a + 3b = 4$

