

10:04 | Graphing Lines

Name: _____

Class: _____

Examples

1 Complete the tables.

a $y = 2x$

x	0	1	2
y	0	2	4

(Multiply the x-value by 2.)

b $x + y = 5$

x	0	1	2
y	5	4	3

(The x- and y-values add to 5.)

c $y = 3x - 12$

x	0	4
y	-12	0

(Substitute when $x = 0$ and $y = 0$.)

$x = 0: y = 3 \times 0 - 12$

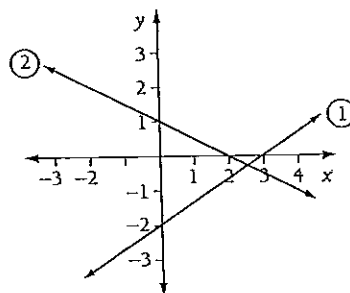
$\therefore y = -12$

$y = 0: 0 = 3x - 12$

$3x = 12$

$\therefore x = 4$

2 Read off the x- and y-intercepts for each line.



Line 1: x-intercept = 3, y-intercept = -2

Line 2: x-intercept = 2, y-intercept = 1

Exercise

1 Complete the tables.

a $y = x$

x	0	1	2
y			

b $y = x + 2$

x	0	1	2
y			

c $x + y = 2$

x	0	
y		0

d $x - y = 2$

x	2	4	6
y			

e $y = x - 3$

x	0	
y		0

f $y = 3x + 2$

x	0	1	2
y			

g $y = -x$

x	0	1	2
y			

h $x + y = 5$

x	1	3	5
y			

i $y = 5x$

x	0	1	2
y			

j $y = 2x + 6$

x	0	
y		0

k $x - y = 4$

x	4	5	6
y			

l $y = 3 - 2x$

x	0	
y		0

2 Read off the x- and y-intercepts for the following lines.

a A

b B

c C

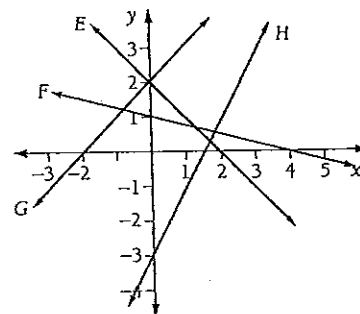
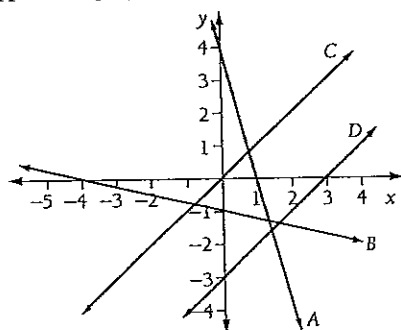
d D

e E

f F

g G

h H



10:04 Graphing Lines

1 a

x	0	1	2
y	0	1	2

b

x	0	1	2
y	2	3	4

c

x	0	2
y	2	0

d

x	2	4	6
y	0	2	4

e

x	0	3
y	-3	0

f

x	0	1	2
y	2	5	8

g

x	0	1	2
y	0	-1	-2

h

x	1	3	5
y	4	2	0

i

x	0	1	2
y	0	5	10

j

x	0	-3
y	6	0

k

x	4	5	6
y	0	1	2

l

x	0	1.5
y	3	0

2 a x-intercept=1, y-intercept=4

d 3, -3

e 2, 2

f 4, 1

b -4, -1

c 0, 0

g -2, 2

h $1\frac{1}{2}$, -3