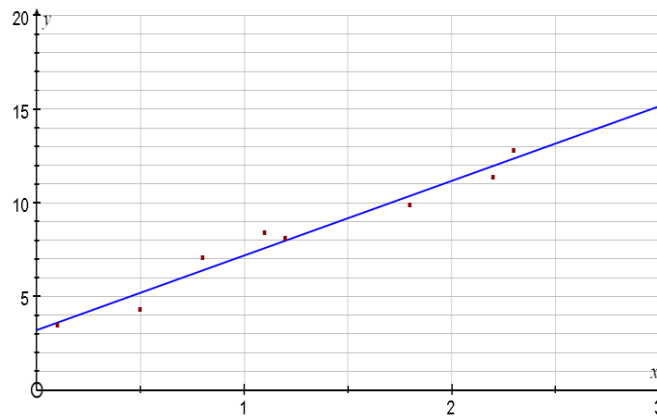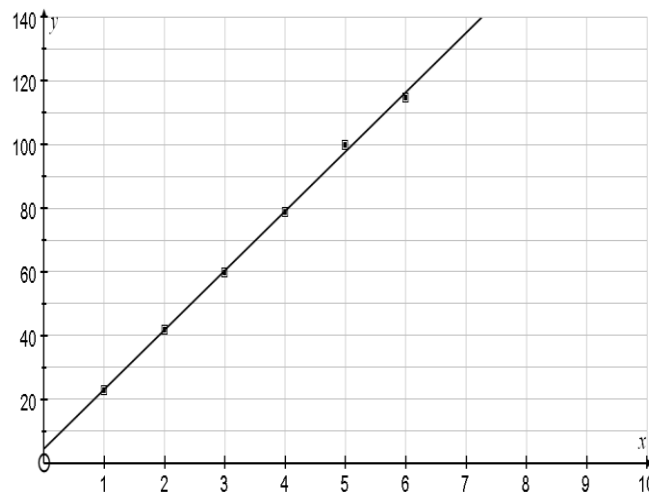# Regression Matching Activity

Cut out the cards and match each set of bivariate data with the appropriate graph, correlation coefficient and equation of the line of best fit. (You should be able to do this without carrying out any calculations).

x	1.2	0.5	0.8	0.1	2.3	1.1	1.8	2.2
y	8.1	4.3	7.1	3.5	12.8	8.4	9.9	11.4

$r = 0.915$

x	1	2	3	4	5	6
y	23	42	60	79	100	115

$r = 0.981$

x	11	25	22	16	18	33	32	24
y	1.8	2.6	2.7	2.2	2.3	3.1	3.7	2.4

$r = \text{-}0.981$

x	55.7	10.4	67.1	91.2	30.8	72.1
y	21.2	45.9	88.3	11.4	75.4	21.4

$r = 0.510$

x	0.0149	0.0375	-0.0172	-0.0345	0.0651
y	357.2	284.3	435.8	571.9	101.2

$r = \text{-}0.405$

x	14.8	10.3	13.2	18.6	12.1	11.8	13.8	15.5
y	8.2	10.1	6.5	15.0	9.9	11.9	12.3	12.4

$r = 0.999$

$y = 406 - 4269x$

$(\bar{x}, \bar{y}) = (3.50, 69.8)$

$y = 4.53 + 18.7x$

$(\bar{x}, \bar{y}) = (1.25, 8.19)$

Regression Matching Activity

$y = 3.21 + 3.98x$	$(\bar{x}, \bar{y}) = $ **(0.0132, 350)**
$y = 3.48 + 0.531x$	$(\bar{x}, \bar{y}) = $ **(22.6, 2.60)**
$y = 67.8 - 0.4375x$	$(\bar{x}, \bar{y}) = $ **(54.6, 43.9)**
$y = 1.00 + 0.0706x$	$(\bar{x}, \bar{y}) = $ **(13.8, 10.8)**

Regression Matching Activity