

Warm-up

Parallel, \perp or neither.

① $m=2, m=-2$

answer: neither

② $y = \frac{2}{3}x + 1 ; y = -\frac{3}{2}x - 8$

answer: perpendicular

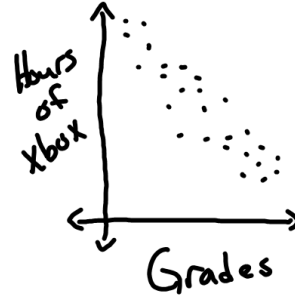
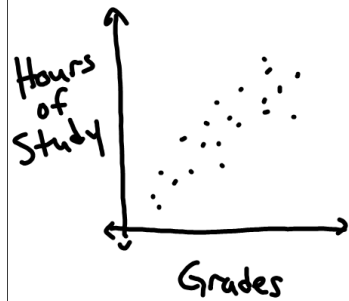
$\left\{ \frac{2}{3}, -\frac{3}{2} \right\}$

③ $y = \underbrace{-4}x - 1 ; y = \underbrace{-4}x + 12$
equal!

answer: parallel

5.6 Fit a Line to Data

Correlation - A connection between two things. One influences the other.



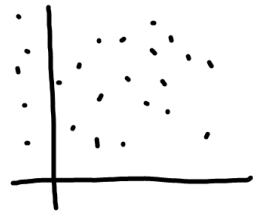
* Think Slope

Positive correlation
(positive slope)

as X increases, the
Y increases

Negative correlation
(negative slope)

as X increases, the
Y decreases

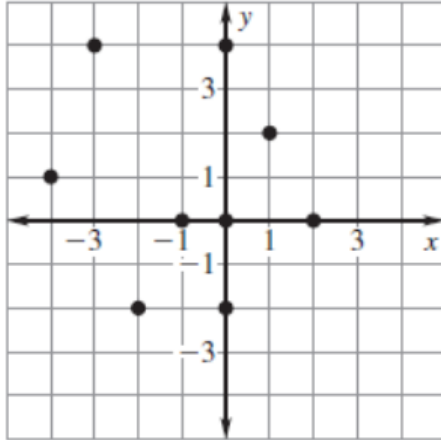


No correlation

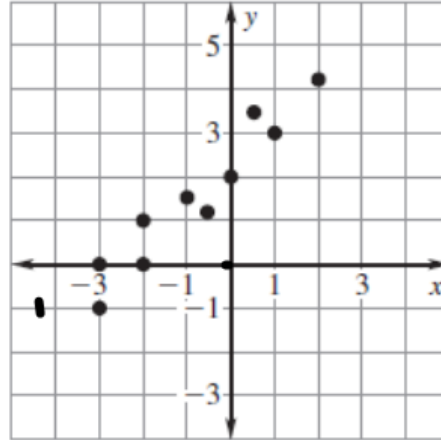
We can find the line that goes thru
the middle of the points

Tell whether x and y show a *positive correlation*, a *negative correlation*, or *relatively no correlation*.

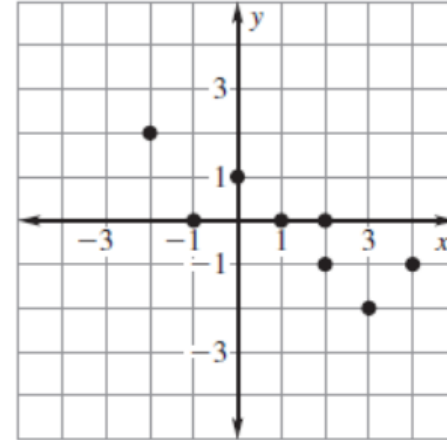
1.



2.



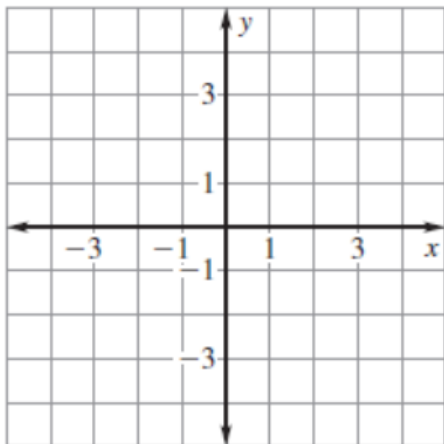
3.



Make a scatter plot of the data. Draw a line of fit. Write an equation for the line.

4.

x	-2	-1	0	1	2	3
y	4	2	1	-2	-1	-2



Pick 2
pts
Write the
line

5.

x	0	0	0.5	1.5	2	2.5
y	-4	-3	-1.5	1	3	4

