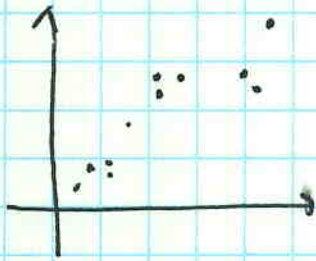


720 1, 3, 4, 6

1. a.

• strong, positive linear



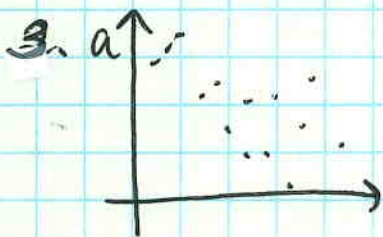
b.  $r = 0.832 \rightarrow$  kind of strong, linear

c.  $y = .342x + 13.688$

Starting at 13.688 grams of protein, protein goes up 1g for every 3 grams of fat.

d.  $f(5) = 15.398$   
 $f(13) = 18.134$

5g fat  $\rightarrow$  15g protein  
13g fat  $\rightarrow$  18g protein



Weak, negative linear

b.  $r = -.769$  not very strong, negative

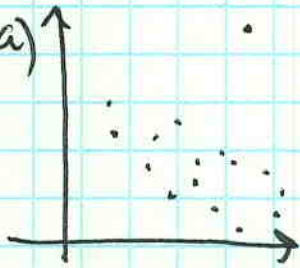
c.  $y = -2.259x + 47.231$

Starting near the worst health care ranking, health care goes down 2 rankings

d.  $f(15) = 13.346$  15<sup>th</sup> in ed is about 13<sup>th</sup> in the

$f(42) = -47.647$  not a possible result

4. a)



strong, linear, negative

b)  $r = -.428$

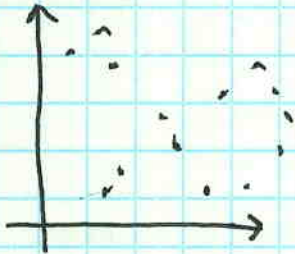
Medium weak, linear, negative

c)  $y = -.00746x + 56.131$

mpg is reduced .7mpg for every pound a vehicle weighs.

d)  $f(2900) = 34.497$   
 $f(4000) = 26.291$

6. a)



Weak, linear, negative

b)  $r = -.512$

medium weak, linear negative

c)  $y = -.527x + 12.385$

Crime decreases as population decreases

d)  $f(15) = 4.48$

15<sup>th</sup> population is fourth in crime