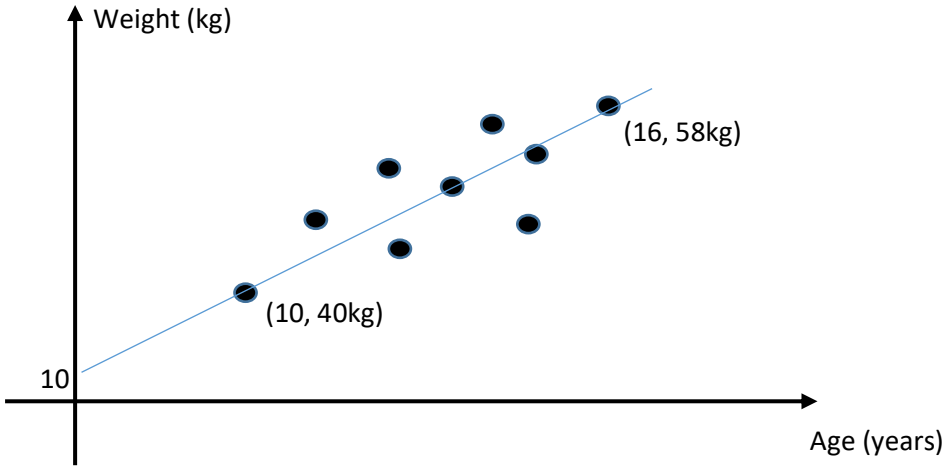
Scattergraph Worksheet.

1. The scattergraph below shows the Weights in kilograms and Ages in years of nine boys:



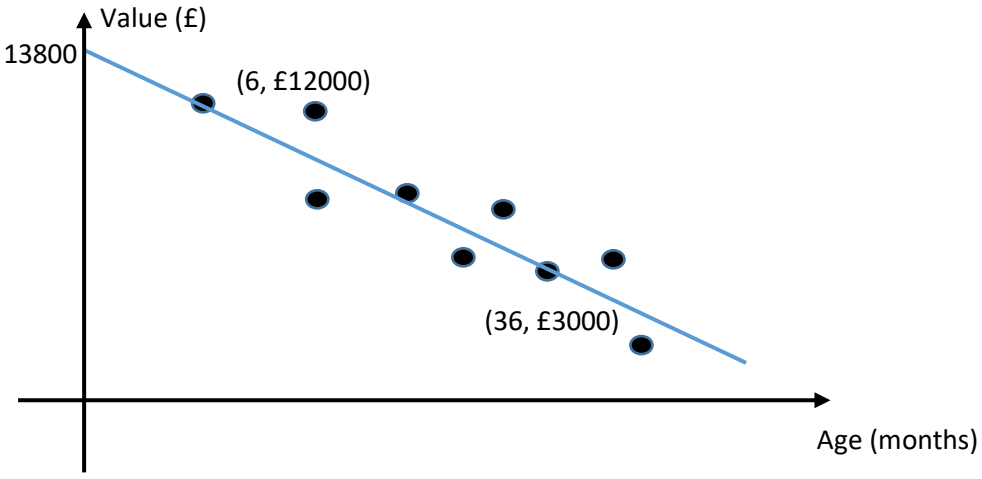
a) What type of correlation does this scattergraph exhibit?

b) Find the equation for the line of best fit in terms of W and A.

c) Using your equation estimate the Weight of a 12 year old boy.

d) Using your equation estimate the Age of a boy who weighs 55kg.

2. The scattergraph below shows the Value of nine Vauxhall Astra's in £'s and their age in months:



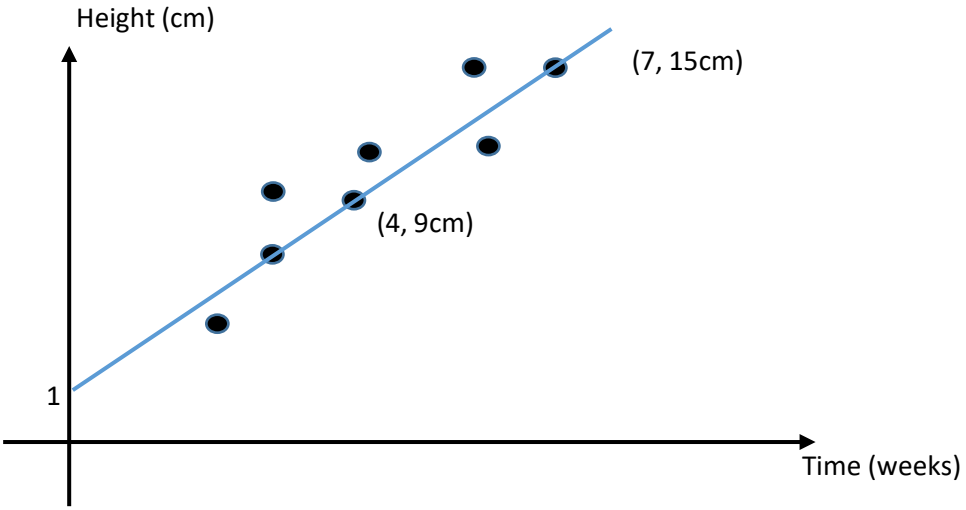
a) What type of correlation does this scattergraph exhibit?

b) Find the equation for the line of best fit in terms of V and A.

c) Using your equation estimate the Value of a car which is 24 months old.

d) Using your equation estimate the Age of a car which is worth £4500.

3. The scattergraph below shows the Height in cm of eight seedlings and the Time in weeks since they were planted:



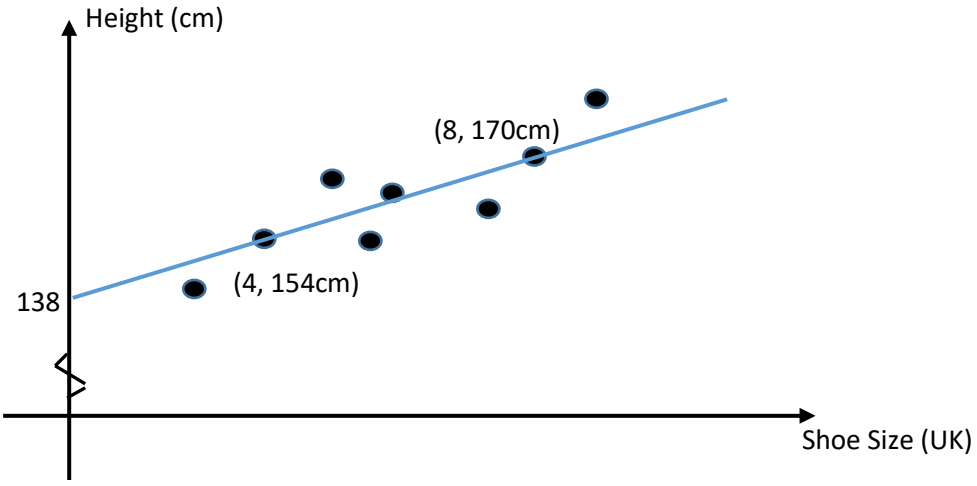
a) What type of correlation does this scattergraph exhibit?

b) Find the equation for the line of best fit in terms of H and T.

c) Using your equation estimate the Height of a seedling 6 weeks after it has been planted.

d) Using your equation estimate the Time since a 21cm high seedling has been planted.

4. The scattergraph below shows the Height in cm and the Shoe Size of eight 2nd year girls:



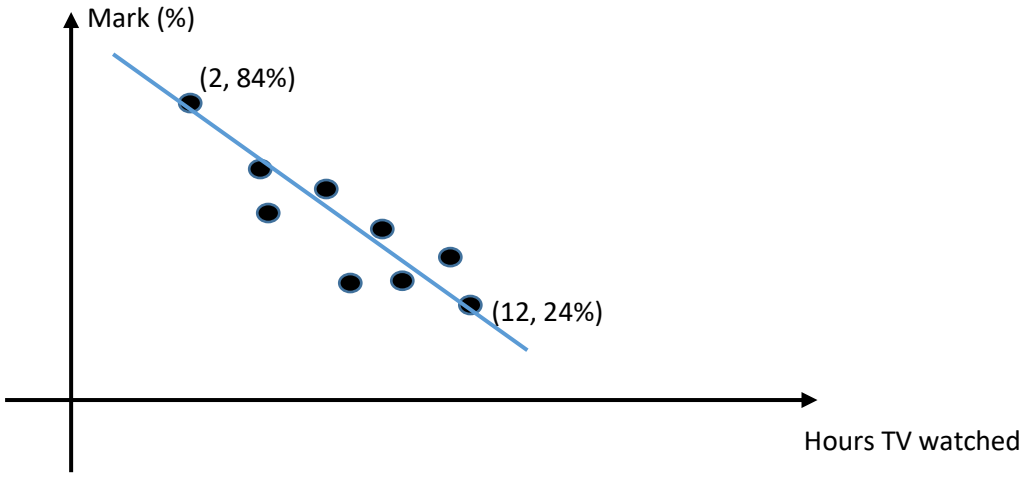
a) What type of correlation does this scattergraph exhibit?

b) Find the equation for the line of best fit in terms of H and S.

c) Using your equation estimate the Height of a girl with a shoe size of 5.

d) Using your equation estimate the shoe size of a girl who is 164cm tall.

5. The scattergraph below shows the Test Marks of nine pupils in a maths test and the number of hours of TV they watched in the week before the test:



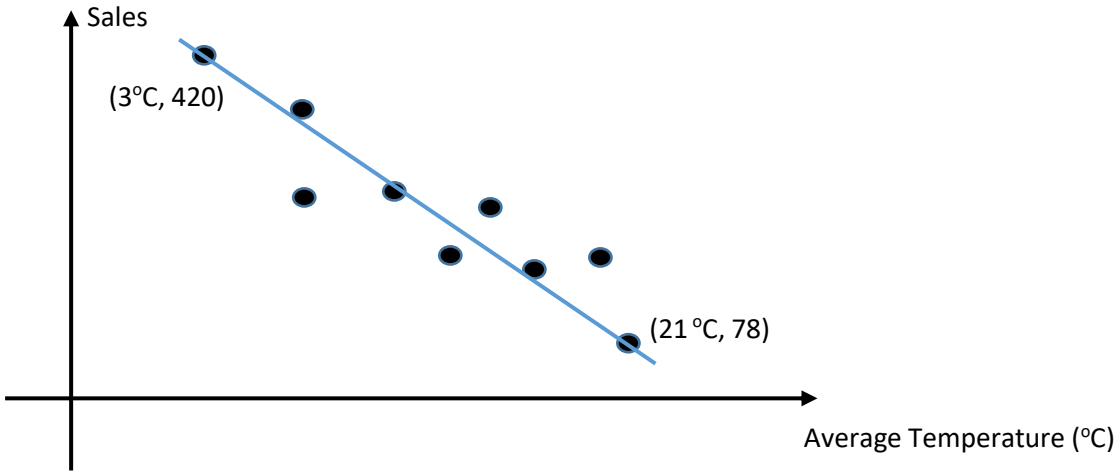
a) What type of correlation does this scattergraph exhibit?

b) Find the equation for the line of best fit in terms of M and H.

c) Using your equation estimate the Mark of a pupil who watched 5 hours of TV.

d) Using your equation estimate how many hours of TV a pupil who got 54% watched.

6. The scattergraph below shows the monthly Sales of Umbrellas for a department and the average Temperature during that month:



a) What type of correlation does this scattergraph exhibit?

b) Find the equation for the line of best fit in terms of S and T.

c) Using your equation estimate the Sales in a month where the average temperature was 14 °C.

d) Using your equation estimate the Average Temperature for a month where Umbrella Sales were 216.