

1. Points rise to the right. Correlation direction?

Up together

Answer: positive

2. Points fall to the right. Direction?

One up, one down

Answer: negative

3. Points form no pattern (a cloud). Correlation?

No trend

Answer: none / near zero

4. Hours studied vs test score usually shows what direction?

More study, higher score

Answer: positive

5. Outside temperature vs heating bill: direction?

Warmer, lower bill

Answer: negative

6. A tight, straight band of points means the correlation is ____?

Little scatter

Answer: strong

7. Does a strong correlation between ice cream sales and drownings mean one CAUSES the other?

Both rise with summer heat

Answer: no - correlation is not causation

8. Points loosely scattered around an upward line: describe direction and strength.

Up but spread out

Answer: positive, weak-to-moderate

9. Shoe size vs reading level in kids is strongly positive. What hidden variable explains it? ★ challenge

Older kids: bigger feet AND read better

Answer: age (a lurking variable)

10. A scatter plot curves upward steeply (not a line). Is a LINEAR model appropriate? What might fit better?

Not straight

Answer: no - exponential/quadratic fits better