

1 State whether correlation or regression is appropriate for the following studies.

a An investigation of fish growth in relation to food type. regression

b An investigation of phosphorus and nitrate content of 15 different soils. correlation

c An investigation of drilling mud contaminants (barium) in marine sediments, in relation to distance from a 40 well offshore oil rig. regression

d An investigation of ice cover and fish catch in 5 different lakes. correlation

2. Compute a t-statistic for a correlation coefficient of $r = 0.25$, with a sample size of 10.

r	n	rsquared	s_r	t = r/s_r
0.65	15	0.4225	0.210768	3.083962
0.35	9	0.1225	0.354058	0.988538
0.25	10	0.0625	0.342327	0.730297