

Assignment: T4-72 Correlation vs. Causation

1. What causation does the cartoon at right imply?
2. What might be a better explanation for the correlation observed?



For each data set shown, state the correlation between the two variables. Determine if you think there is a causation relationship between the variables. If so, explain why. If not, give some other factors that might cause the correlation.

Absences	6	2	15	9	12	5	8	10	20
Final Grade	82	98	43	74	58	90	78	70	23

3. What is the correlation?
4. Do you think there is a causal relationship? If so, what is it?
5. Why do you think there is causation? or What else might explain the correlation?

# of Fires	43	48	56	61	67	70
Thousands of Acres Burned	128	130	135	143	145	152

6. What is the correlation?
7. Do you think there is a causal relationship? If so, what is it?
8. Why do you think there is causation? or What else might explain the correlation?

Hours	0	1	2	3	4	5
Bacteria	1	5	15	55	210	790

9. What is the correlation?
10. Do you think there is a causal relationship? If so, what is it?
11. Why do you think there is causation? or What else might explain the correlation?

Absences	6	0	15	9	12	5	8	10	20
# of Assignments Failed	15	1	36	29	26	8	17	25	48

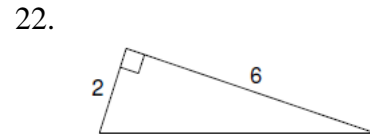
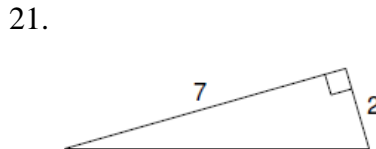
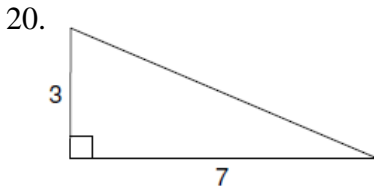
12. What is the correlation?
13. Do you think there is a causal relationship? If so, what is it?
14. Why do you think there is causation? or What else might explain the correlation?

Age (years)	12	1	9	20	6	3
Weight (pounds)	75	24	63	152	40	38

15. What is the correlation?
16. Do you think there is a causal relationship? If so, what is it?
17. Why do you think there is causation? or What else might explain the correlation?
18. Give an example of a situation where there is correlation with a causation.
19. Give an example of a situation where there is correlation without causation.

Review:

Find the missing side length using the Pythagorean Theorem.



Using the information provided, determine if the following triangles are right triangles. You must show your work.

