Determine the statement which may not be true in some cases

- If Cov (X, Y) =0, then X and Y are independent
- If Cov (X, Y) =0, then Var(X+Y) =Var(X) + Var(Y)
- If X and Y are independent then Cov (X, Y) = 0
- If X and Y are independent then P(X = x, Y= y)=P(X = x) P(Y = y)

The following are percentages of fat found in 5 samples of each of two brands of baby food: A: 5.7, 4.5, 6.2, 6.3, 7.3 B: 6.3, 5.7, 5.9, 6.4, 5.1 Which of the following procedures is appropriate to test the hypothesis of equal average fat content in the two types of ice cream?

- Paired t-test with 5 d.f
- Two sample t-test with 8 d.f
- Paired t-test with 4 d.f
- Sign test

The p-value is

- the largest significance level at which the null hypothesis can be rejected
- the largest significance level at which the alternative hypothesis can be rejected
- the smallest significance level at which the null hypothesis can be rejected
- the smallest significance level at which the null hypothesis cannot be rejected