

E. The fact that

$$6 \times 7 = 42,$$

is a counter-example to which of the following statements?

- (a) the product of any two odd integers is odd;
- (b) if the product of two integers is not a multiple of 4 then the integers are not consecutive;
- (c) if the product of two integers is a multiple of 4 then the integers are not consecutive;
- (d) any even integer can be written as the product of two even integers.