1 When T is increased, the rate of *every* chemical reaction must...

- A increase
- B stay the same
- C decrease
- D more information needed.

2 For a particular reaction at 25C, the rate law is found to be k[X][Y]2. At 50C, the rate increases because of change in ...

- A [X]
- B [Y]
- C k
- D [X], [Y], and k

3 Rate constant depends on T as k = A exp(-|Ea|/(R T)). The value of k at T = 0 is ...

- A 0
- B A
- C Ea/(R T)
- D infinity

4 Rate constant depends on T as k = A exp(-|Ea|/(R T)). The value of k at T = infinity is ...

- A 0
- B A
- C Ea/(R T)
- D infinity

5 For an elementary reaction, K = kFor/kRev. kFor and kRev both increase with T. This means as T is increased, K ...

- A increases
- B stays the same
- C decreases
- D further information needed

6 What must be true for a reaction to be endothermic?

- A kFor > kRev
- B kFor < kRev
- C Ea,For > Ea,Rev
- D Ea,For < Ea,Rev

7 What must be true so that the equilibrium constant, K = kFor/kRev, will increase with increasing T?

- A kFor > kRev
- B kFor < kRev
- C kFor increases faster than kRev
- D kFor increases slower than kRev

8 What must be true so that the equilibrium constant, K = kFor/kRev, will increase with increasing T?

A kFor > kRev
B kFor < kRev
C EaFor > EaRev
D EaFor < EaRev