C) an increase in the reaction rate by 23 times;
D) an increase the reaction rate by 15 times;
E) an increase the reaction rate 10 times.

70. An increase in the concentration of oxygen by 3 times in the reaction $2CuS + 3O_2 = 2CuO + 2SO_2$ results in:
A) an increase in reaction rate by 9 times;
B) an increase in the reaction rate by 25 times;
C) an increase in the reaction rate by 3 times;
D) reducing of the reaction rate by 9 times;
E) reducing of the reaction rate by 25 times.

71. An increase in the concentration of SO_2 by a factor of 3 in the reaction $2SO_2 + O_2 = 2SO_3$ leads to:
A) an increase in the reaction rate by 9 times;
B) reducing of the reaction rate by 9 times;
C) reducing of the reaction rate by 8 times;
D) reducing of the reaction rate by 3 times;
E) an increase in the reaction rate by 3 times.

72. An increase in the oxygen concentration by a factor of 2 in the reaction $C_2H_4 + 3O_2 = 2CO_2 + 2H_2O$ leads to:
A) an increase in the reaction rate by 2 times;
B) an increase in the reaction rate by 6 times;
C) decrease in the reaction rate by 6 times;
D) an increase in the reaction rate by 8 times;
E) reducing of the reaction rate by 8 times.

73. Reducing the oxygen concentration by 2 times in the reaction $CuS + 3O_2 = 2CuO + 2SO_2$ results in:
A) an increase in the reaction rate by 2 times;
B) decrease in the reaction rate by 2 times;
C) an increase in the reaction rate by 9 times;
D) reducing of the reaction rate by 6 times;
E) reducing of the reaction rate by 8 times.

74. Increasing the concentration of sulfur oxide (IV) by 2 times in the reaction $2SO_2 + O_2 = 2SO_3$ results in:
A) an increase in the reaction rate by 2 times;
B) reducing of the reaction rate by 3 times;
C) an increase in the reaction rate by 3 times;
D) an increase in the reaction rate 9 times;
E) reducing of the reaction rate by 9 times.

75. For the reaction $2X + Y = Z$ with C_x = 1.0 mol/L and C_y = 2.5 mol/L, the reaction rate is 0.5 mol/(L·h). Calculate the reaction rate constant:
A) 0.01;
B) 0.005;
C) 0.2;
D) 0.3;
E) 0.05.