1. What is the product of matrices A and B, where A = [1 2; 3 4] and B = [5 6; 7 8]?

2. If matrix C is the product of matrices D and E, where D = [2 5; 7 4] and E = [9 6; 7 8], what is the value of C?

3. If matrix F is the product of matrices G and H, where G = [1 2 3; 4 5 6] and H = [7 8; 9 10; 11 12], what is the dimension of matrix F?

4. What is the product of matrices I and J, where I = [1 2 3; 4 5 6] and J = [7 8; 9 10; 11 12]?

5. If matrix K is the product of matrices L and M, where L = [1 2; 3 4] and M = [5 6 7 8], what is the value of K?

6. If matrix N is the product of matrices O and P, where O = [1 2; 3 4; 5 6] and P = [7 8 9], what is the dimension of matrix N?

7. What is the product of matrices Q and R, where Q = [1 2 3 4; 5 6 7 8] and R = [9 10; 11 12; 13 14; 15 16]?

8. If matrix S is the product of matrices T and U, where T = [1 2 3; 4 5 6; 7 8 9] and U = [10 11; 12 13; 14 15], what is the value of S?