

Given the following matrices, simplify the expressions.

$$A = \begin{bmatrix} 7 & -2 \\ -1 & 0 \end{bmatrix}$$

$$B = \begin{bmatrix} 3 & 7 \\ -2 & 4 \end{bmatrix}$$

$$C = \begin{bmatrix} 1 & -5 \\ -3 & 2 \end{bmatrix}$$

$$D = \begin{bmatrix} 2 & -3 & 1 \\ 4 & 2 & -1 \\ -2 & 3 & -3 \end{bmatrix}$$

$$E = \begin{bmatrix} 4 & 3 & 1 \\ -2 & -1 & -1 \end{bmatrix}$$

$$F = \begin{bmatrix} 6 & 5 & -2 \\ 2 & 4 & -1 \\ 3 & 1 & 4 \end{bmatrix}$$

1. $AB + BC$

9. $\frac{1}{2}(AB) - 2(BC)$

2. BE

10. $(A + B)E$

3. EB

11. $3(AC)$

4. $3A + C$

12. $(B + C)F$

5. ED

13. $BE + E$

6. DF

14. $A + 2B - 3C$

7. $-2(FD)$

15. $3D - F$

8. A^2