1. Multiply the vector $(-5, -1)$ by the scalar $\sqrt{11}$.

- ○ $(-5\sqrt{11}, -1-\sqrt{11})$
- ○ $(\sqrt{11}-5, \sqrt{11}-1)$
- ○ $(5+\sqrt{11}, 1+\sqrt{11})$
- ● $\mathbf{(-5\sqrt{11}, -\sqrt{11})}$

2. Calculate the product: $\sqrt{11}\,(7, \frac{7}{9})$.

- ○ $(7\sqrt{11}, \frac{7}{9}-\sqrt{11})$
- ● $\mathbf{(7\sqrt{11}, \frac{7\sqrt{11}}{9})}$
- ○ $(\sqrt{11}-7, \sqrt{11}-\frac{7}{9})$
- ○ $(7+\sqrt{11}, \frac{7}{9}+\sqrt{11})$

3. Calculate the product: $\sqrt{7}\,(-7, \frac{4}{7})$.

- ○ $(7+\sqrt{7}, \sqrt{7}-\frac{4}{7})$
- ● $\mathbf{(-7\sqrt{7}, \frac{4}{\sqrt{7}})}$
- ○ $(-7\sqrt{7}, \frac{4}{7}-\sqrt{7})$
- ○ $(\sqrt{7}-7, \frac{4}{7}+\sqrt{7})$

4. Compute the product of the scalar $\sqrt{7}$ and vector $(5, 4)$.

- ○ $(\sqrt{7}-5, \sqrt{7}-4)$
- ○ $(5, 4\sqrt{7})$
- ○ $(5+\sqrt{7}, 4+\sqrt{7})$
- ● $\mathbf{(5\sqrt{7}, 4\sqrt{7})}$

5. Compute the product of the scalar $\sqrt{7}$ and vector $\left(\frac{1}{2}, 3\right)$.

- ○ $\left(\frac{1}{2}+\sqrt{7}, 3+\sqrt{7}\right)$
- ● $\left(\frac{\sqrt{7}}{2}, 3\sqrt{7}\right)$
- ○ $\left(\frac{\sqrt{7}}{2}, \frac{3}{\sqrt{7}}\right)$
- ○ $\left(\sqrt{7}-\frac{1}{2}, \sqrt{7}-3\right)$

6. Calculate the product: $-\sqrt{11}\left(-\frac{3}{5}, -\frac{8}{9}\right)$.

- ○ $\left(\frac{3\sqrt{11}}{5}, \sqrt{11}-\frac{8}{9}\right)$
- ○ $\left(-\frac{3}{5}-\sqrt{11}, -\frac{8}{9}-\sqrt{11}\right)$
- ● $\left(\frac{3\sqrt{11}}{5}, \frac{8\sqrt{11}}{9}\right)$
- ○ $\left(\frac{3}{5}-\sqrt{11}, \frac{8}{9}-\sqrt{11}\right)$

7. Multiply the vector $\left(-6, -\frac{7}{5}\right)$ by the scalar $-\sqrt{5}$.

- ● $\left(6\sqrt{5}, \frac{7}{\sqrt{5}}\right)$
- ○ $\left(6-\sqrt{5}, \frac{7}{5}-\sqrt{5}\right)$
- ○ $\left(-6-\sqrt{5}, -\frac{7}{5}-\sqrt{5}\right)$
- ○ $\left(6\sqrt{5}, \frac{7}{5\sqrt{5}}\right)$

8. Compute the product of the scalar $-\sqrt{5}$ and vector $(-3, 7)$.

- ○ $\left(3\sqrt{5}, 7+\sqrt{5}\right)$
- ○ $\left(-3-\sqrt{5}, 7-\sqrt{5}\right)$
- ○ $\left(3-\sqrt{5}, -7-\sqrt{5}\right)$
- ● $\left(3\sqrt{5}, -7\sqrt{5}\right)$

9. Compute the product: $-\sqrt{7}\,(-3, -\frac{7}{6})$.

- ○ $(3-\sqrt{7}\,,\ \frac{7}{6}-\sqrt{7}\,)$
- ○ $(-3-\sqrt{7}\,,\ -\frac{7}{6}-\sqrt{7}\,)$
- ○ $\left(-3,\ \frac{7\sqrt{7}}{6}\right)$
- ● $\left(\mathbf{3\sqrt{7}},\ \mathbf{\frac{7\sqrt{7}}{6}}\right)$

10. Compute the product of the scalar $\sqrt{5}$ and vector $(-\frac{9}{2}, -6)$.

- ○ $(\frac{9}{2}+\sqrt{5}\,,\ 6+\sqrt{5}\,)$
- ○ $\left(-\frac{9\sqrt{5}}{2},\ -6-\sqrt{5}\right)$
- ○ $(\sqrt{5}-\frac{9}{2},\ \sqrt{5}-6)$
- ● $\left(\mathbf{-\frac{9\sqrt{5}}{2}},\ \mathbf{-6\sqrt{5}}\right)$

11. Compute the product of the scalar $\sqrt{11}$ and vector $(-\frac{8}{5}, \frac{5}{8})$.

- ○ $\left(-\frac{8}{5},\ \frac{5\sqrt{11}}{8}\right)$
- ○ $(\sqrt{11}-\frac{8}{5},\ \frac{5}{8}+\sqrt{11}\,)$
- ● $\left(\mathbf{-\frac{8\sqrt{11}}{5}},\ \mathbf{\frac{5\sqrt{11}}{8}}\right)$
- ○ $(\frac{8}{5}+\sqrt{11}\,,\ \sqrt{11}-\frac{5}{8})$

12. Multiply the vector $(-\frac{3}{5}, 3)$ by the scalar $\sqrt{3}$.

- ○ $(\sqrt{3}-\frac{3}{5},\ 3+\sqrt{3}\,)$
- ○ $(\frac{3}{5}+\sqrt{3}\,,\ \sqrt{3}-3)$
- ○ $\left(-\frac{3\sqrt{3}}{5},\ \sqrt{3}\right)$
- ● $\left(\mathbf{-\frac{3\sqrt{3}}{5}},\ \mathbf{3\sqrt{3}}\right)$

13. Compute the product of the scalar $\sqrt{11}$ and vector $\left(-4, -\frac{9}{5}\right)$.

- ● $\left(-4\sqrt{11}, -\frac{9\sqrt{11}}{5}\right)$
- ○ $\left(4+\sqrt{11}, \frac{9}{5}+\sqrt{11}\right)$
- ○ $\left(-4\sqrt{11}, -\frac{9}{5\sqrt{11}}\right)$
- ○ $\left(\sqrt{11}-4, \sqrt{11}-\frac{9}{5}\right)$

14. Compute the product of the scalar $\sqrt{7}$ and vector $(6, -1)$.

- ○ $\left(6+\sqrt{7}, \sqrt{7}-1\right)$
- ● $\left(6\sqrt{7}, -\sqrt{7}\right)$
- ○ $\left(\sqrt{7}-6, 1+\sqrt{7}\right)$
- ○ $\left(6\sqrt{7}, -1-\sqrt{7}\right)$

15. Compute the product of the scalar $-\sqrt{3}$ and vector $\left(\frac{9}{2}, -\frac{7}{2}\right)$.

- ○ $\left(-\frac{9}{2}-\sqrt{3}, \frac{7}{2}-\sqrt{3}\right)$
- ○ $\left(\frac{9}{2}-\sqrt{3}, -\frac{7}{2}-\sqrt{3}\right)$
- ● $\left(-\frac{9\sqrt{3}}{2}, \frac{7\sqrt{3}}{2}\right)$
- ○ $\left(\frac{9}{2}, \frac{7\sqrt{3}}{2}\right)$

16. Compute the product of the scalar $-\sqrt{7}$ and vector $(5, 7)$.

- ○ $\left(-5\sqrt{7}, -\sqrt{7}\right)$
- ○ $\left(5-\sqrt{7}, 7-\sqrt{7}\right)$
- ● $\left(-5\sqrt{7}, -7\sqrt{7}\right)$
- ○ $\left(-5-\sqrt{7}, -7-\sqrt{7}\right)$

17. Calculate the product: $\sqrt{3}\,(-7, 6)$.

- ○ $(-7\sqrt{3}, 2\sqrt{3})$
- ○ $(7+\sqrt{3}, \sqrt{3}-6)$
- ○ $(\sqrt{3}-7, 6+\sqrt{3})$
- ● $\boldsymbol{(-7\sqrt{3}, 6\sqrt{3})}$

18. Calculate the product: $\sqrt{5}\,(-4, \frac{8}{5})$.

- ● $\boldsymbol{\left(-4\sqrt{5}, \frac{8}{\sqrt{5}}\right)}$
- ○ $(\sqrt{5}-4, \frac{8}{5}+\sqrt{5})$
- ○ $(4+\sqrt{5}, \sqrt{5}-\frac{8}{5})$
- ○ $(-4\sqrt{5}, \frac{8}{5}-\sqrt{5})$

19. Calculate the product: $-\sqrt{3}\,(\frac{4}{7}, 1)$.

- ○ $(\frac{4}{7}-\sqrt{3}, 1-\sqrt{3})$
- ○ $(-\frac{4\sqrt{3}}{7}, 1+\sqrt{3})$
- ● $\boldsymbol{\left(-\frac{4\sqrt{3}}{7}, -\sqrt{3}\right)}$
- ○ $(-\frac{4}{7}-\sqrt{3}, -1-\sqrt{3})$

20. Compute the product of the scalar $\sqrt{3}$ and vector $(-\frac{1}{2}, \frac{2}{3})$.

- ○ $\left(-\frac{\sqrt{3}}{2}, \frac{2}{3\sqrt{3}}\right)$
- ● $\boldsymbol{\left(-\frac{\sqrt{3}}{2}, \frac{2}{\sqrt{3}}\right)}$
- ○ $(\frac{1}{2}+\sqrt{3}, \sqrt{3}-\frac{2}{3})$
- ○ $(\sqrt{3}-\frac{1}{2}, \frac{2}{3}+\sqrt{3})$