Question 4

- Spanning Sets
- Determinant of a Matrix

$$Q = \{1 + 2x, 2x + x^2, 4 + 2x - 3x^2\}$$

We must compute the determinant of the following matrix.

$$\left(\begin{array}{ccc}
0 & 1 & 3 \\
1 & 3 & 1 \\
2 & 4 & 1
\end{array}\right)$$

- Define span (Q).
- What is the dimension of span (Q)?

Question 5: Gram Schmidt Process

| X | f(x) |
|---|------|
| 1 | 1 |
| 2 | 1 |
| 3 | 1 |
| 4 | 1 |
| 5 | 1 |