

1. Which of the following is not a vector space of polynomials?

- A. The set of all polynomials with degree less than or equal to 3.
- B. The set of all polynomials with degree greater than 3.
- C. The set of all polynomials with degree less than 3.
- D. The set of all polynomials with degree greater than or equal to 3.

2. Which of the following is not a basis for the vector space of all polynomials with degree less than or equal to 3?

- A. $\{1, x, x^2, x^3\}$
- B. $\{1, x, x^2\}$
- C. $\{1, x^2, x^3\}$
- D. $\{1, x, x^3\}$

3. Which of the following is not a vector space of polynomials?

- A. The set of all polynomials with degree less than or equal to 2.
- B. The set of all polynomials with degree greater than 2.
- C. The set of all polynomials with degree less than 2.
- D. The set of all polynomials with degree greater than or equal to 2.

4. Which of the following is not a basis for the vector space of all polynomials with degree less than or equal to 2?

- A. $\{1, x, x^2\}$
- B. $\{1, x\}$
- C. $\{1, x^2\}$
- D. $\{x, x^2\}$

5. Which of the following is not a vector space of polynomials?

- A. The set of all polynomials with degree less than or equal to 1.
- B. The set of all polynomials with degree greater than 1.
- C. The set of all polynomials with degree less than 1.
- D. The set of all polynomials with degree greater than or equal to 1.

6. Which of the following is not a basis for the vector space of all polynomials with degree less than or equal to 1?

- A. $\{1, x\}$
- B. $\{1\}$
- C. $\{x\}$
- D. $\{x^2\}$

7. Which of the following is not a vector space of polynomials?

- A. The set of all polynomials with degree less than or equal to 0.
- B. The set of all polynomials with degree greater than 0.
- C. The set of all polynomials with degree less than 0.
- D. The set of all polynomials with degree greater than or equal to 0.

8. Which of the following is not a basis for the vector space of all polynomials with degree less than or equal to 0?

- A. $\{1\}$
- B. $\{x\}$
- C. $\{x^2\}$

D. {0}

Answer Key: 1-B, 2-D, 3-C, 4-D, 5-C, 6-D, 7-C, 8-D