Task card 1 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = -4x^4 - x^2 - 2x$. Answer as: degree, leading coefficient.

Task card 2 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -3x^3 - 2x$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 3 Polynomial Degree & End Behavior

What is the greatest number of turning points the graph of $f(x) = -x^3 + 6x^2 - 5x + 4$ can have?

Task card 4 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = 3x^3 + x^2 + 9x - 7$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 5 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = x^4 - 5x^2 + 4$. Answer as: degree, leading coefficient.

Task card 6 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -4x^4 - 3x^3 + 9x^2 + 6x - 5$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 7 Polynomial Degree & End Behavior

What is the greatest number of turning points the graph of $f(x) = 2x^2 - 7$ can have?

Task card 8 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = 2x^4 - 2x^3 + 9x^2 - 3$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 9 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = 4 + 6x^4 - 2x^5$. Answer as: degree, leading coefficient.

Task card 10 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -2x + 1 + 6x^2 - 4x^5$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 11 Polynomial Degree & End Behavior

What is the greatest number of turning points the graph of $f(x) = 1 + 4x^3 - x^5 + x^4 + 6x$ can have?

Task card 12 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = 5x^4 + x + 6$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 13 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = 2x^2 - 2$. Answer as: degree, leading coefficient.

Task card 14 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = x^3 + 9x^2$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 15 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -2x^2 + 4 + 2x^4 - 4x^5 + 4x^3$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 16 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = -4(x + 2)^3(x - 1)^2(x - 5)^3$. Answer as: degree, leading coefficient.

Task card 17 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = 2(x + 2)(x - 5)(x - 6)^3$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 18 Polynomial Degree & End Behavior

What is the greatest number of turning points the graph of $f(x) = x^2(x - 4)^2$ can have?

Task card 19 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -(x - 2)(x - 6)$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 20 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = -3 - x^3 - 3x^4$. Answer as: degree, leading coefficient.

Task card 21 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -x^2 - 5 - 3x^5 + 6x^4$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 22 Polynomial Degree & End Behavior

Find the degree and the leading coefficient of $f(x) = -4x^2 + 9x$. Answer as: degree, leading coefficient.

Task card 23 Polynomial Degree & End Behavior

Describe the end behavior of $f(x) = -4x^2 - 7x - 1$. Does the graph go up or down at the left end and at the right end? Answer as: left, right (for example: down, up).

Task card 24 Polynomial Degree & End Behavior

What is the greatest number of turning points the graph of $f(x) = 5x^2 + 2x - 2$ can have?

Polynomial Degree & End Behavior Task Cards

Recording sheet · Grade 11 · Answer each question about the polynomial function.

Name: _____ Date: _____

Scan to check your answers

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Polynomial Degree & End Behavior Task Cards: Answer Key

Grade 11 · Easy

The answers online

1. 4, -4	**2.** up, down	**3.** 2
4. down, up	**5.** 4, 1	**6.** down, down
7. 1	**8.** up, up	**9.** 5, -2
10. up, down	**11.** 4	**12.** up, up
13. 2, 2	**14.** down, up	**15.** up, down
16. 8, -4	**17.** down, up	**18.** 3
19. down, down	**20.** 4, -3	**21.** up, down
22. 2, -4	**23.** down, down	**24.** 1