



Rational Root Theorem - Leading Coefficient (Random Order)

$$1 \quad f(x) = -24x^2 - 54x - 27 + 3x^4 + 6x^3$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
-24	-54	3	6

$$2 \quad f(x) = 6x^3 + 18 + 42x + 30x^2$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
18	6	42	30

$$3 \quad f(x) = 4x^4 + 12 - 16x^2 - 8x^3 + 8x$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
-16	-8	8	4

$$4 \quad f(x) = -10x^2 + 5x^3 + 30 - 25x$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
-10	30	-25	5

$$5 \quad f(x) = 24 - 16x^3 + 46x^2 + 2x^4 - 56x$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
-56	-16	46	2

$$6 \quad f(x) = 30x - 18 + 2x^3 - 14x^2$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
-18	30	-14	2

$$7 \quad f(x) = -40 + 5x^5 - 145x^2 - 55x^3 - 130x + 5x^4$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
-55	-130	-145	5

$$8 \quad f(x) = 9x - 54 - 21x^3 + 39x^2 + 3x^4$$

Valid rational roots are in the form p/q where q must be a factor of the leading coefficient. What is the leading coefficient in this polynomial?

A	B	C	D
3	9	39	-21