



Synthetic Division Setup - Find the Divisor (with Hint)

1

$$\frac{x^5 - 4x^4 - 3x^3 + 10x^2 + 8x}{(x + 1)}$$

?	1	-4	-3	10	8	0

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
3	11

2

$$\frac{x^3 + 4x^2 - 3x - 18}{(x + 3)}$$

?	1	4	-3	-18

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
6	-3

3

$$\frac{x^4 + x^3 - 13x^2 - x + 12}{(x - 1)}$$

?	1	1	-13	-1	12

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
5	10

4

$$\frac{x^3 + 4x^2 + 3x}{(x + 4)}$$

?	1	4	3	0

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
4	8

5

$$\frac{x^3 + 6x^2 + 8x}{(x - 4)}$$

?	1	6	8	0

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
11	8

6

$$\frac{x^3 + x^2 - 8x - 12}{(x - 3)}$$

?	1	1	-8	-12

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
3	5

7

$$\frac{x^3 - 3x^2 - 6x + 8}{(x + 2)}$$

?	1	-3	-6	8

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
7	5

8

$$\frac{x^5 - x^4 - 15x^3 + 25x^2 + 14x - 24}{(x + 1)}$$

?	1	-1	-15	25	14	-24

Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid? Hint: The divisor value is the number that makes the binomial divisor equal to zero.

A	B
-1	10