



Synthetic Division Setup - Find the Divisor

1 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^5 + 4x^4 - x^3 - 16x^2 - 12x}{(x-1)}$$

?	1	4	-1	-16	-12	0

A	B	C
3	1	7
D	E	F
5	9	4

2 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^5 + 5x^4 - x^3 - 17x^2 + 12x}{(x-0)}$$

?	1	5	-1	-17	12	0

A	B	C
6	2	1
D	E	F
7	10	0

3 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^5 - x^4 - 18x^3 + 16x^2 + 32x}{(x-1)}$$

?	1	-1	-18	16	32	0

A	B	C
4	10	9
D	E	F
1	2	5

4 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^4 - 6x^3 + 7x^2 + 6x - 8}{(x-1)}$$

?	1	-6	7	6	-8

A	B	C
9	7	1
D	E	F
8	4	2

5 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

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

?	1	-4	3	0

A	B	C
6	3	9
D	E	F
2	5	7

6 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^3 - 4x^2 + 3x}{(x-0)}$$

?	1	-4	3	0

A	B	C
7	3	2
D	E	F
0	6	8

7 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^3 - 16x}{(x-4)}$$

?	1	0	-16	0

A	B	C
11	4	5
D	E	F
3	1	12

8 Using synthetic division to divide this polynomial by this binomial, which value goes in the divisor position of the synthetic division grid?

$$\frac{x^4 - 20x^2 + 64}{(x-2)}$$

?	1	0	-20	0	64

A	B	C
6	9	4
D	E	F
8	1	2