



Synthetic Division Setup - Single Coefficient, Random Order

1 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

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

-2	1	?	8	0

A	14	5	6
D	11	9	8
B			
E			
C			
F			

2 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

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

-1	1	?	-3	-2

A	0	3	5
D	8	2	10
B			
E			
C			
F			

3 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

$$\frac{6 + 11x + 6x^2 + x^3}{(x - 3)}$$

3	?	6	11	6

A	0	4	1
D	6	3	7
B			
E			
C			
F			

4 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

$$\frac{-6x^3 + x^5 + 12 - 35x + 32x^2 - 4x^4}{(x - 1)}$$

1	1	-4	?	32	-35	12

A	1	-6	13
D	2	10	14
B			
E			
C			
F			

5 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

$$\frac{x^4 + 11x^2 + 6x^3 + 6x}{(x - 0)}$$

0	1	?	11	6	0

A	15	12	3
D	6	9	2
B			
E			
C			
F			

6 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

$$\frac{-50x^2 + 24x - 10x^4 + 35x^3 + x^5}{(x - 0)}$$

0	?	-10	35	-50	24	0

A	4	6	2
D	1	9	0
B			
E			
C			
F			

7 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

$$\frac{10x^3 + x^4 + 50x + 35x^2 + 24}{(x + 2)}$$

-2	1	10	?	50	24

A	50	44	20
D	35	26	23
B			
E			
C			
F			

8 Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the top row?

$$\frac{9x^2 + 24 + 26x + x^3}{(x + 4)}$$

-4	1	9	26	?

A	20	40	14
D	28	24	42
B			
E			
C			
F			