



Synthetic Division Setup - All Coefficients, Random Order (with Hint)

1

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

3	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		1	1	-12	0

B		0	-12	1	1

2

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

-2	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		1	0	-13	-12	0

B		2	0	-13	-12	0

3

$$\frac{-5x^3 + 6x^2 + x^4}{(x-0)}$$

0	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		0	0	6	-5	1

B		1	-5	6	0	0

4

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

-4	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		1	9	26	-24

B		2	9	26	24

5

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

-4	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		2	-3	-6	8

B		1	-3	-6	-8

6

$$\frac{x^5 - 14x^3 - 32x - 88x^2 + 5x^4 + 128}{(x-1)}$$

1	?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		1	5	-14	-88	-32	-128

B		1	5	-14	-88	-32	128

7

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

1	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		2	5	6	0

B		1	5	6	0

8

$$\frac{8x + x^3 - 16 + 7x^2}{(x-1)}$$

1	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which set of values goes in the top row of the synthetic division grid? Hint: Write the coefficients in order from the highest power of x to the lowest, using 0 for any missing term.

A		-16	8	7	1

B		2	7	8	-16