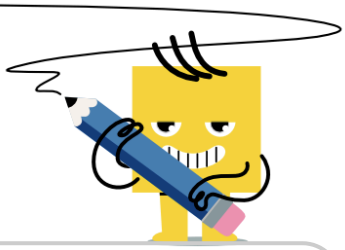
Name

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



1

$$\frac{x^4-14x^3+73x^2-168x+144}{(x-2)}$$

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

	2	-14	73	-168	144

B

	1	-14	73	-168	144

2

$$\frac{x^3+3x^2-16x-48}{(x+4)}$$

-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

	-48	-16	3	1

B

	1	3	-16	-48

3

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

-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	2	-3	0

B

	1	2	-3	0

4

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

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	2	-8

B

	8	2	-5	1

5

$$\frac{x^5+5x^4-20x^2-16x}{(x-0)}$$

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

	2	5	0	-20	-16	0

B

	0	-16	-20	0	5	1

6

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

-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

	2	5	6	0

B

	0	6	5	1

7

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

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	1	-6	0	0

B

	2	1	-6	0	0

8

$$\frac{x^3-8x^2+21x-18}{(x+1)}$$

-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	-8	21	-18

B

	-18	21	-8	1