Name

Synthetic Division Setup - Complete the Quotient Row (with Hint)

1

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

0	1	0	-2	0	1	0
	?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	2	0	-2	0	1	0

B

	1	0	-2	0	1	0

2

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

4	1	-2	-8	0
	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	0	0	2	1

B

	2	2	0	0

3

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

2	1	5	-6	-32	32
	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	2	7	8	-16	0

B

	1	7	8	-16	0

4

$$\frac{x^5 + 3x^4 - 13x^3 - 47x^2 - 48x - 16}{(x - 1)}$$

1	1	3	-13	-47	-48	-16
	?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	-120	-104	-56	-9	4	1

B

	2	4	-9	-56	-104	-120

5

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

-1	1	-4	1	6
	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	1	-5	6	0

B

	0	6	-5	1

6

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

0	1	0	-4	0
	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	0	-4	0	1

B

	2	0	-4	0

7

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

1	1	2	-3	0
	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	0	0	3	1

B

	2	3	0	0

8

$$\frac{x^5 + x^4 - 14x^3 - 24x^2}{(x - 0)}$$

0	1	1	-14	-24	0	0
	?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which values complete the bottom row of the synthetic division? Hint: Bring down the first coefficient, multiply by the divisor, then add down each column.

A

	0	0	-24	-14	1	1

B

	2	1	-14	-24	0	0