Name

Synthetic Division Setup - Full Setup, Random Order (with Hint)

1

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

?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

0	0	2	-3	0	1

B

0	1	0	-3	2	0

2

$$\frac{-32 + x^4 - 7x^3 + 6x^2 + 32x}{(x - 1)}$$

?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

-1	-32	32	6	-7	1

B

1	-32	32	6	-7	1

3

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

?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

2	3	-1	-3	1

B

-2	3	-1	-3	1

4

$$\frac{-7x^2 - 8 + x^3 + 14x}{(x - 4)}$$

?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

-4	-8	14	-7	1

B

4	-8	14	-7	1

5

$$\frac{-20x + 5x^3 - 16 + x^4}{(x - 1)}$$

?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

-1	-16	-20	0	5	1

B

-1	1	5	0	-20	-16

6

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

?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

0	1	5	-2	-24	0

B

0	0	-24	-2	5	1

7

$$\frac{x^4 + 24x^2 - 10x^3 - 128 + 32x}{(x + 2)}$$

?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

-2	-128	32	24	-10	1

B

-2	1	-10	24	32	-128

8

$$\frac{28x^2 + 36x + x^4 + 9x^3 + 16}{(x + 2)}$$

?	?	?	?	?	?

Using synthetic division to divide this polynomial by this binomial, which divisor and set of coefficients correctly set up the synthetic division? Hint: The divisor is the value that makes the binomial zero, and the coefficients go in order from the highest power of x to the lowest.

A

-2	16	36	28	9	1

B

-2	1	9	28	36	16