Name

Synthetic Division Setup - Any Product Row Value (with Hint)

1

$$\frac{x^4+8x^3+19x^2+12x}{(x-0)}$$

0	1	8	19	12	0
		?			
	1				

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
0	5

2

$$\frac{x^5-6x^4+10x^3-11x+6}{(x+1)}$$

-1	1	-6	10	0	-11	6
		-1	7	-17	17	?
	1	-7	17	-17	6	

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
-6	1

3

$$\frac{x^3-x^2-8x+12}{(x-3)}$$

3	1	-1	-8	12
		3	6	?
	1	2	-2	

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
3	-6

4

$$\frac{x^3+11x^2+40x+48}{(x+4)}$$

-4	1	11	40	48
		-4	-28	?
	1	7	12	

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
-48	55

5

$$\frac{x^5+7x^4+2x^3-64x^2-96x}{(x-0)}$$

0	1	7	2	-64	-96	0
		0	0	?		
	1	7	2			

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
3	8

6

$$\frac{x^3-5x^2+3x+9}{(x-3)}$$

3	1	-5	3	9
		3	-6	?
	1	-2	-3	

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
16	0

7

$$\frac{x^5-12x^3+16x^2}{(x-1)}$$

1	1	0	-12	16	0	0
		1	1	?		
	1	1	-11			

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
20	14

8

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

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

Using synthetic division to divide this polynomial by this binomial, which value goes in the highlighted box of the middle row? Hint: Each middle-row value is the previous bottom-row value multiplied by the divisor.

A	B
3	5