Name

Synthetic Division Setup - Final Polynomial from the Full Setup

1 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

$$\frac{x^5+x^4-16x^3-16x^2}{(x-0)}$$

0	1	1	-16	-16	0	0

A $2x^4+x^3-16x^2-16x$

B $x^5+x^4-16x^3-16x^2$

C $x^4+x^3-16x^2-16x$

D $x^4+x^3-16x^2-16x+\frac{1}{(x-0)}$

2 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

$$\frac{x^3-2x^2-9x+18}{(x-3)}$$

3	1	-2	-9	18

A x^2+x-6

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

C x^3+x^2-6x

D $2x^2+x-6$

3 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

$$\frac{x^3-x^2-12x}{(x-0)}$$

0	1	-1	-12	0

A x^2-x-12

B x^3-x^2-12x

C $2x^2-x-12$

D $x^2-x-12+\frac{1}{(x-0)}$

4 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

$$\frac{x^4+5x^3-8x^2-48x}{(x+2)}$$

-2	1	5	-8	-48	0

A $2x^3+3x^2-14x-20+\frac{40}{(x+2)}$

B $x^4+3x^3-14x^2-20x+40$

C $x^3+3x^2-14x-20-\frac{40}{(x+2)}$

D $x^3+3x^2-14x-20+\frac{40}{(x+2)}$

5 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

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

0	1	2	-1	-2

A x^3+2x^2-x-2

B $x^2+2x-1-\frac{2}{(x-0)}$

C $2x^2+2x-1-\frac{2}{(x-0)}$

D $x^2+2x-1+\frac{2}{(x-0)}$

6 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

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

-1	1	4	3	0	0

A $2x^3+3x^2$

B x^4+3x^3

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

D x^3+3x^2

7 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

$$\frac{x^3+5x^2+7x+3}{(x+1)}$$

-1	1	5	7	3

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

B x^3+4x^2+3x

C x^2+4x+3

D $2x^2+4x+3$

8 Using synthetic division to divide this polynomial by this binomial, what is the resulting quotient and remainder?

$$\frac{x^4+4x^3-x^2-16x-12}{(x+2)}$$

-2	1	4	-1	-16	-12

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

B x^3+2x^2-5x-6

C $x^4+2x^3-5x^2-6x$

D $2x^3+2x^2-5x-6$