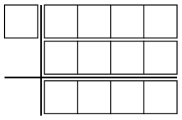
Name

Synthetic Division Setup - Final Polynomial from No Setup

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

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



A $2x^2-x-2$

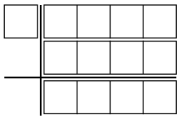
B x^3-x^2-2x

C x^2-x-2

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

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

$$\frac{x^3+2x^2-16x-32}{(x+4)}$$



A $x^2-2x-8+\frac{1}{(x+4)}$

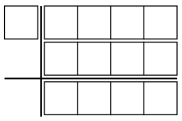
B x^2-2x-8

C x^3-2x^2-8x

D $2x^2-2x-8$

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

$$\frac{x^3-4x^2+x+6}{(x-0)}$$



A $x^2-4x+1+\frac{6}{(x-0)}$

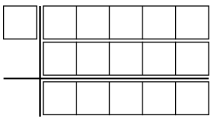
B $2x^2-4x+1+\frac{6}{(x-0)}$

C $x^2-4x+1-\frac{6}{(x-0)}$

D x^3-4x^2+x+6

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

$$\frac{x^4-9x^3+28x^2-36x+16}{(x-1)}$$



A $2x^3-8x^2+20x-16$

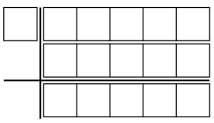
B $x^4-8x^3+20x^2-16x$

C $x^3-8x^2+20x-16$

D $x^3-8x^2+20x-16+\frac{1}{(x-1)}$

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

$$\frac{x^4-11x^3+44x^2-76x+48}{(x-2)}$$



A $x^4-9x^3+26x^2-24x$

B $x^3-9x^2+26x-24+\frac{1}{(x-2)}$

C $x^3-9x^2+26x-24$

D $2x^3-9x^2+26x-24$

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

$$\frac{x^5-x^4-21x^3+9x^2+108x}{(x-1)}$$

A $x^4-21x^2-12x+96+\frac{96}{(x-1)}$

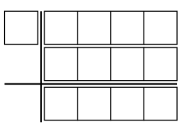
B $2x^4-21x^2-12x+96+\frac{96}{(x-1)}$

C $x^5-21x^3-12x^2+96x+96$

D $x^4-21x^2-12x+96-\frac{96}{(x-1)}$

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

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



A $x^3+7x^2+24x+96$

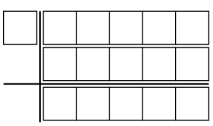
B $x^2+7x+24+\frac{96}{(x-4)}$

C $2x^2+7x+24+\frac{96}{(x-4)}$

D $x^2+7x+24-\frac{96}{(x-4)}$

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

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



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

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

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

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