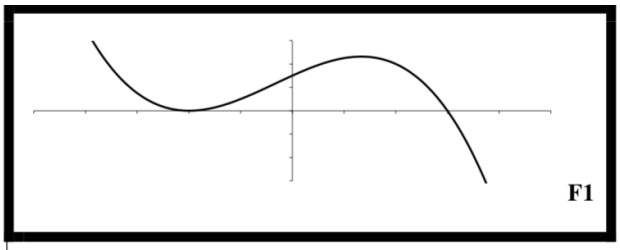
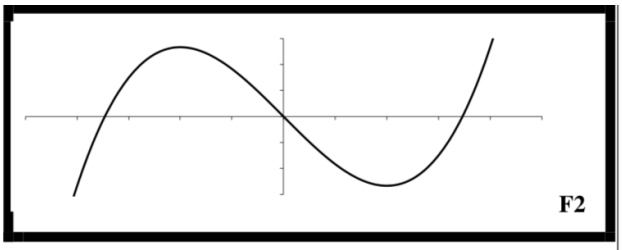
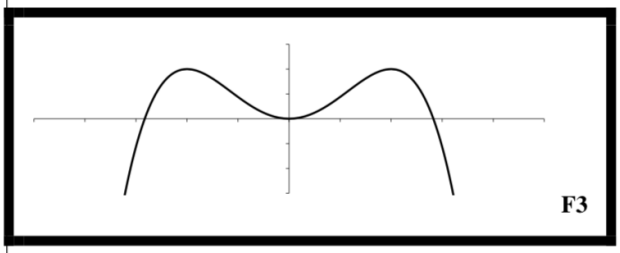
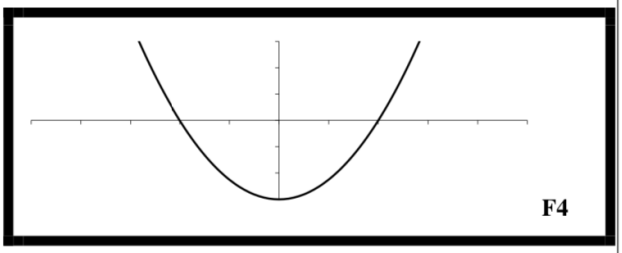
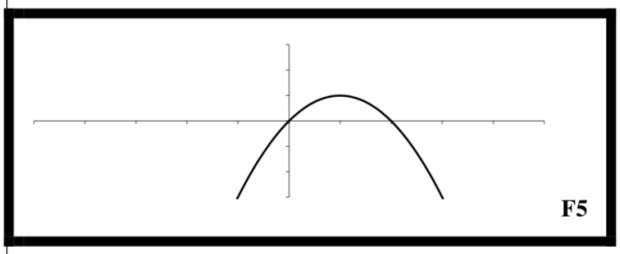
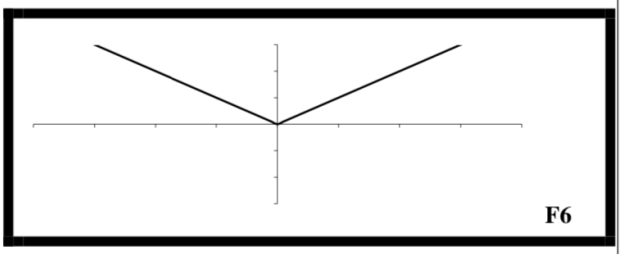

F1

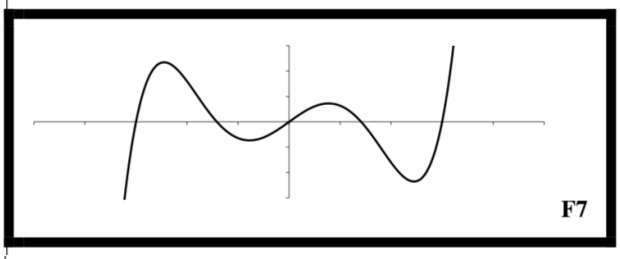

F2

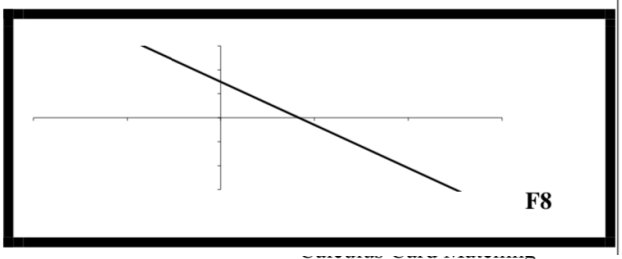

F3

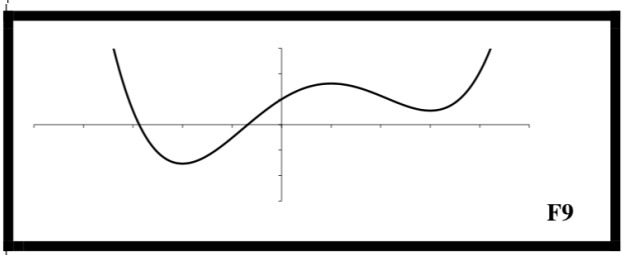

F4

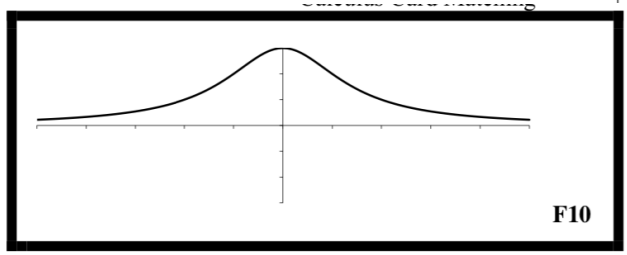

F5

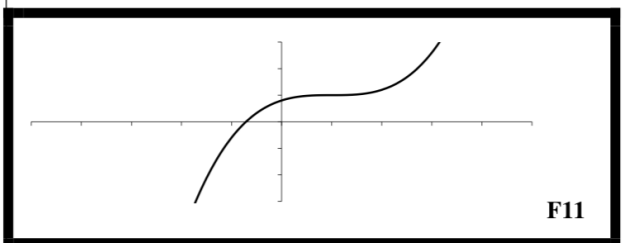

F6

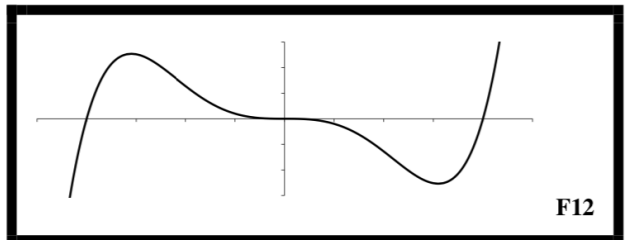

F7

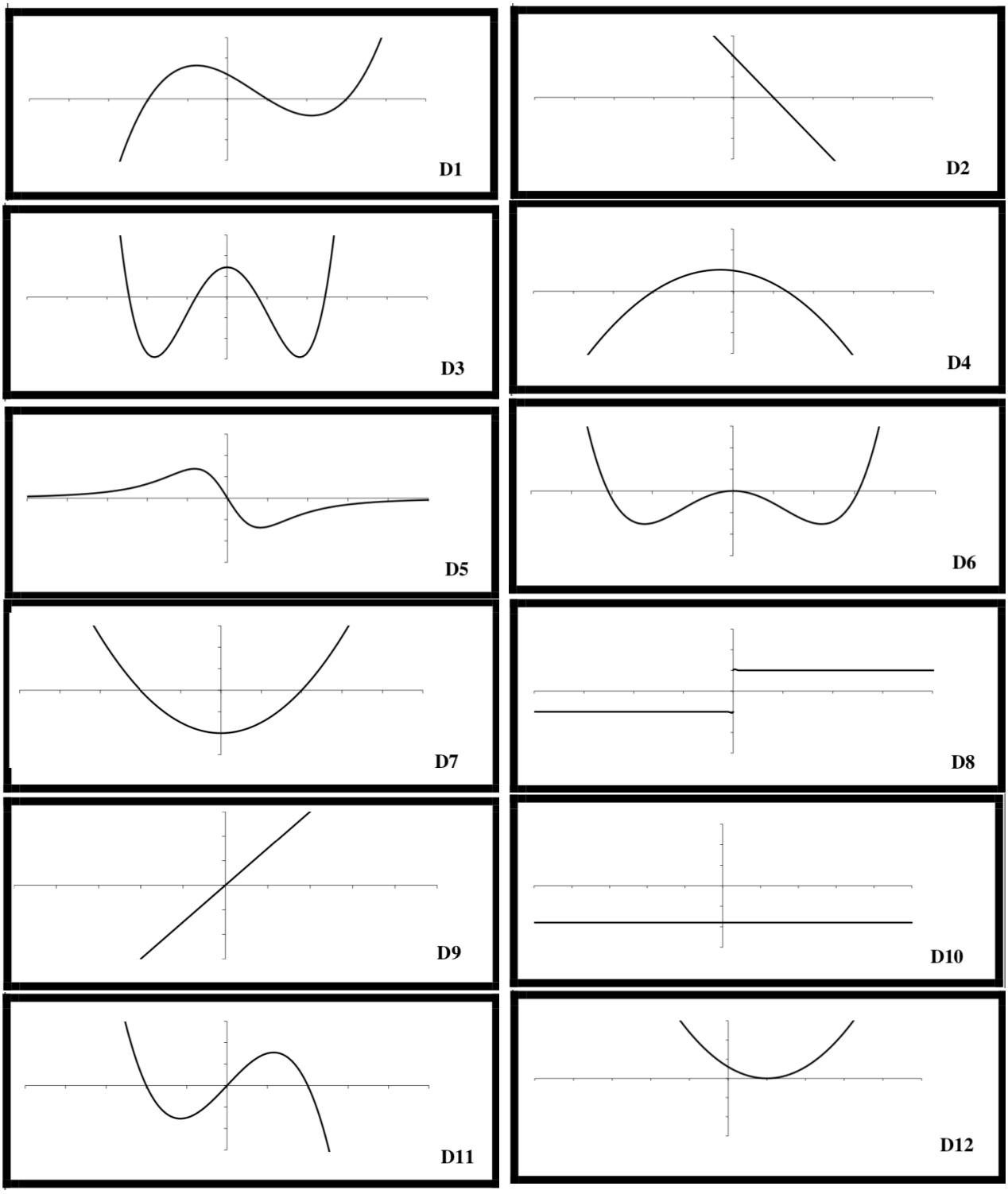

F8


F9


F10


F11


F12


D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12

DESCRIPTION OF FUNCTION
The function has local maxima at $x = -2$ and $x = 2$.

f1

DESCRIPTION OF FUNCTION
This function has four critical points.

f2

DESCRIPTION OF FUNCTION
This odd function has a triple root at $x = 0$, as well as roots at $x = 4$ and $x = -4$.

f3

DESCRIPTION OF FUNCTION
This is the graph of an absolute value function.

f4

DESCRIPTION OF FUNCTION
This is the graph of a linear function.

f5

DESCRIPTION OF FUNCTION
This function has critical points at $x = -2$, $x = 1$, and $x = 3$.

f6

DESCRIPTION OF FUNCTION
On this graph, $x = -2$ is both a root of the function and a critical point.

f7

DESCRIPTION OF FUNCTION
This function has a horizontal asymptote at $y = 0$.

f8

DESCRIPTION OF FUNCTION
This is the graph of a quadratic function with a negative leading coefficient.

f9

DESCRIPTION OF FUNCTION
This function never decreases.

f10

DESCRIPTION OF FUNCTION
This function has a point of inflection at $x = 0$.

f11

DESCRIPTION OF FUNCTION
This even function is decreasing when $x < 0$, and increasing when $x > 0$.

f12

DESCRIPTION OF DERIVATIVE

The graph of this derivative is not positive for all x in [–3, 3], and is symmetric to the y-axis.

d1

DESCRIPTION OF DERIVATIVE

The graph of this derivative is positive when $x < 0$ and is negative when $x > 0$.

d2

DESCRIPTION OF DERIVATIVE

The graph of the derivative is negative and constant for all x.

d3

DESCRIPTION OF DERIVATIVE

The graph of this derivative is a cubic polynomial with a positive leading coefficient.

d4

DESCRIPTION OF DERIVATIVE

This derivative graph is a line that has a positive slope.

d5

DESCRIPTION OF DERIVATIVE

The slope of this graph is always equal to –2.

d6

DESCRIPTION OF DERIVATIVE

The derivative is positive when $x < -2$ and when $0 < x < 2$, and is negative everywhere else.

d7

DESCRIPTION OF DERIVATIVE

The derivative is always greater than or equal to zero.

d8

DESCRIPTION OF DERIVATIVE

This derivative has the general form $y = ax^2 + bx + c, \quad a < 0.$

d9

DESCRIPTION OF DERIVATIVE

This derivative graph is an even function with a local maximum at $x = 0$.

d10

DESCRIPTION OF DERIVATIVE

This graph of the derivative is positive when $|x| > 2$.

d11

DESCRIPTION OF DERIVATIVE

The graph of this derivative is undefined when $x = 0$, but is constant for $x < 0$ and for $x > 0$.

d12