

# Math 1210 #19

## Sketching a function

### EX 1

Sketch the graph of  $f(x) = x^2(x^2 - 1)$ .

#### 1a)

domain

#### 1b)

symmetry

#### 1c)

x-intercepts

#### 1d)

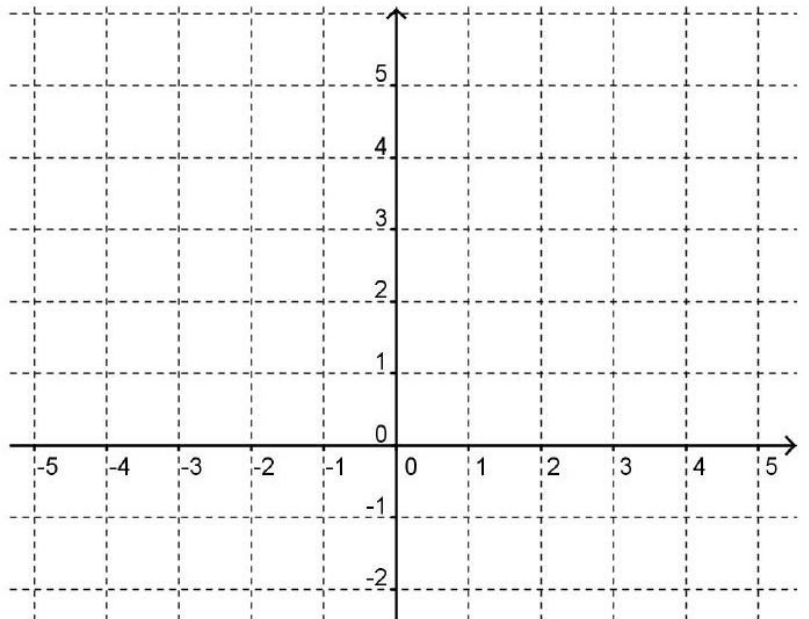
First derivative information

#### 1e)

Second derivative information

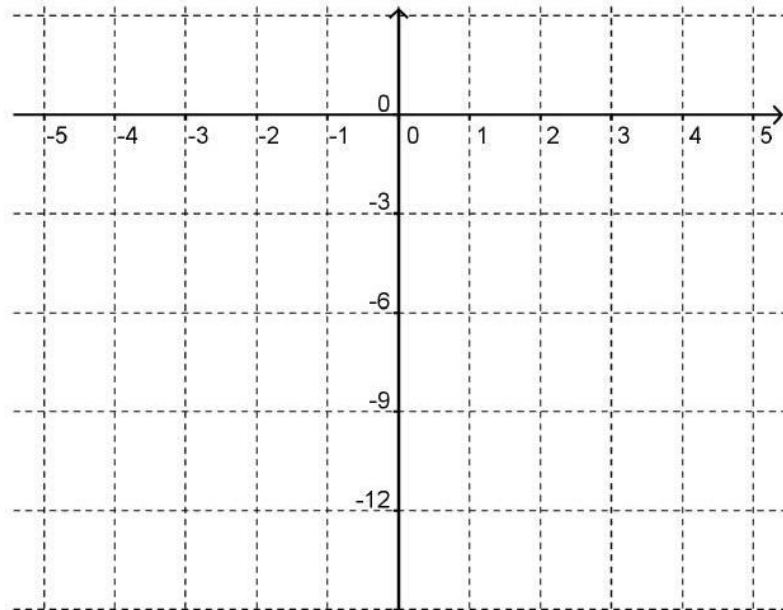
#### 1f)

Asymptotes:



**EX 2**

Sketch the graph of  $f(x) = \frac{(x-3)^2}{x}$ .

**EX 3**

Sketch the graph of  $f(x) = |x|^3$ .

