

... and represent it on the real line. The solution is the interval $(-\infty, 0]$.

b) $x^2 - x^3 \leq 0$ (b)

c) $\frac{x+1}{x-1} > \frac{x}{x-1}$ (c)

d) $x^2 - 4 \geq 0$ (d)

e) $2x + 5 < 3x - 4$ (e)

(1)

... and represent it on the real line. The solution is the interval $(-\infty, 0]$.

- $\frac{x^2 - x}{x^2 - 4} \geq 0$
- $\frac{2x + 2}{x} < \frac{4}{x + 1}$
- $x^2 - 9 < 0$

... and represent it on the real line. The solution is the interval $(-\infty, 0]$.

- $3|x - 1| + 2x > 3x - 2$

... and represent it on the real line. The solution is the interval $(-\infty, 0]$.

- $y = 3x^2 - 1$
- $u^2 = 3y - 1$
- $x - 2y = 4$
- $\begin{cases} 2x & \text{if } x \leq 1 \\ 6 - 2x & \text{if } x > 3 \end{cases}$

Exercise 6. Decide whether the following functions are even, odd, or neither:

• $f(x) = 3x^4 - 1$

• $g(x) = x^2 + 2x$

• $h(x) = 3x^2 - 1 + x$

• $t(x) = x^3 + 2x - 1$