Ex 3

$\frac{-3}{25} = \frac{-12}{100} = \frac{-12}{10^2} \in \mathbb{D}$

$\frac{0,002}{0,27} = \frac{2}{270} \in \mathbb{Q}$

$\frac{(0,003)^2}{100^4} = \frac{(3\times 10^{-3})^2}{(10^2)^4} = \frac{9\times 10^{-6}}{10^8} = \frac{9}{10^6\times 10^8}$

$= \frac{9}{10^{14}} \in \mathbb{D}$

Ex 4

x	-3		1		7
$f(x)$	-1	↗	4	↘	-2

Ex 5

$A = -3t(-4t+1) - (-1+6t)$

$= 12t^2 - 3t + 1 - 6t$

$= 12t^2 - 9t + 1$

$B = 3(-2b+4)(-b-3)$

$= 3(2b^2 + 6b - 4b - 12)$

$= 6b^2 + 18b - 12b - 36 = \boxed{6b^2 + 6b - 36}$

$C = (3k-1)^2 = (3k)^2 - 2\times 3k \times 1 + 1^2$

$= 9k^2 - 6k + 1$

$D = (x+4)^2 - (x-6)(-1+x)$

$= x^2 + 2\times x \times 4 + 4^2 - (-x + x^2 + 6 - 6x)$

$= x^2 + 8x + 16 + x - x^2 - 6 + 6x$

$= \boxed{15x + 10}$

Ex 6

1) $f(x) = -2(1-x)^2$

$f(4) = -2(1-4)^2 = -2(-3)^2 = -2\times 9$

$= \boxed{-18}$

2) $g(t) = \frac{1-t^2}{2-t}$

$g(-3) = \frac{1-(-3)^2}{2-(-3)} = \frac{1-9}{2+3} = \boxed{\frac{-8}{5}}$

Ex 7

$\frac{2x-5}{3} \xrightarrow{\times 3} 2x-5 \xrightarrow{+5} 2x \xrightarrow{:2} x$

Ex 1

$[2;7] \cap [4,8] = [4,7[$

$]-\infty;2] \cup [0;6[=]-\infty,6[$.