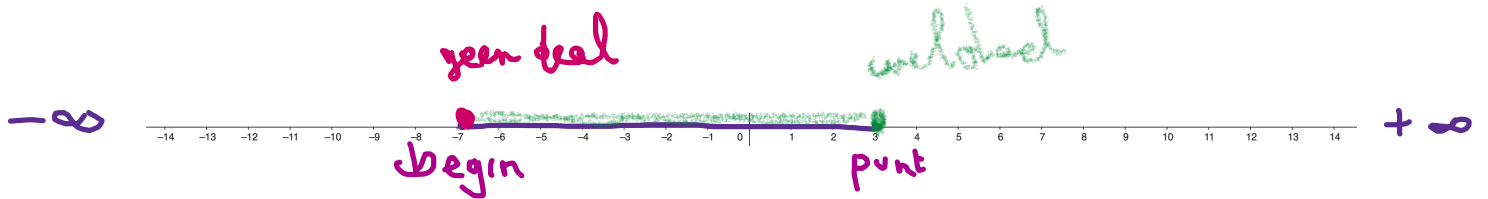


I. Intervallen

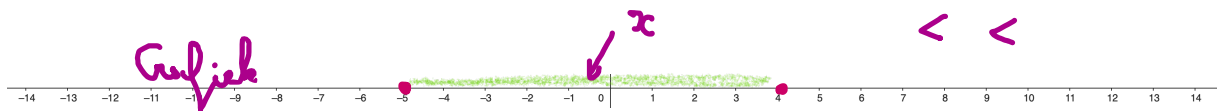
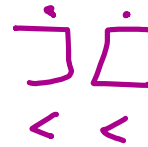
A. Open, gesloten en halfopen intervallen

1. DEFINITIE INTERVALLLEN



Begrensd

2. OPEN INTERVALLLEN



Gefiek

haverlijes

ongelykheit

$$]-5, 4[$$
$$-5 < x < 4$$

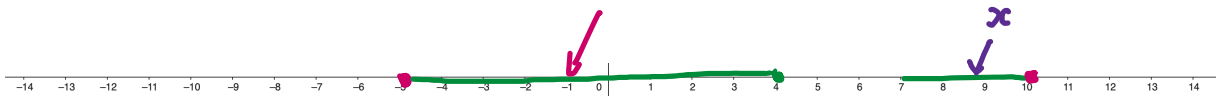
3. GESLOTEN INTERVALLLEN



$$[-5, 4]$$

$$-5 \leq x \leq 4$$

4. HALFOFEN INTERVALLEN



$$]-5, 4]$$

$$-5 < x \leq 4$$

$$0 \in]-5, 4]$$

$$-5 \notin]-5, 4]$$

$$4 \in]-5, 4]$$

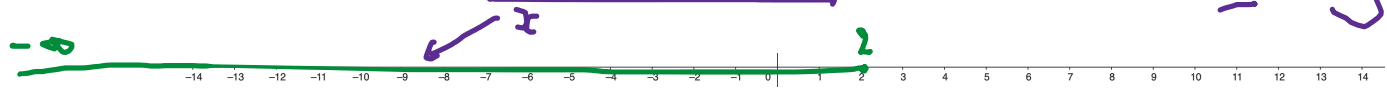
$$[7, 10[$$

$$7 \leq x < 10$$

$$7 \in [7, 10[$$

$$10 \notin [7, 10[$$

5. ONBEGRENSTE INTERVALLEN ($-\infty$ of $+\infty$)



$$]-\infty, 2]$$

$$x \leq 2$$

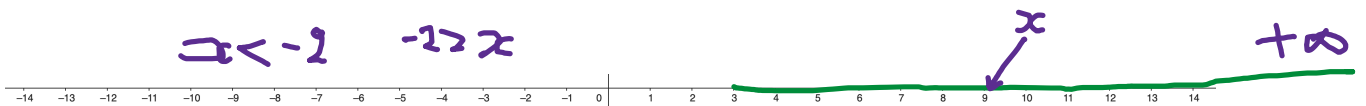
$$(\rightarrow \cancel{2} < x \leq 2)$$



$$]-\infty, -2[$$

$$x < -2$$

$$-2 > x$$



$$[3, +\infty[$$

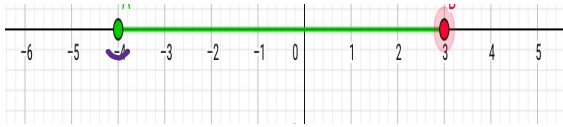
$$3 \leq x \text{ of } x \geq 3$$



$$]-7, +\infty[$$

$$-7 < x$$

6. OEFENINGEN



$$] \quad [\\ [-4, 3[$$

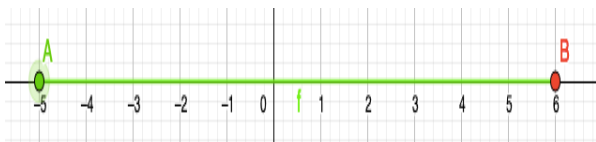
$$x \\ -4 \leq x < 3$$

$$]-\infty, 0[\quad x < 0$$



$$[-5, 6[$$

$$-5 \leq x < 6$$



$$[-2, +\infty[$$

$$x \geq -2 \quad -2 \leq x$$

$$]-3, 8]$$



$$x$$

$$]-3, 8[$$

$$]-\infty, 1[$$



$$x < 1$$

$$-3 < x < 7$$



$$x$$

$$]-3, +7[$$

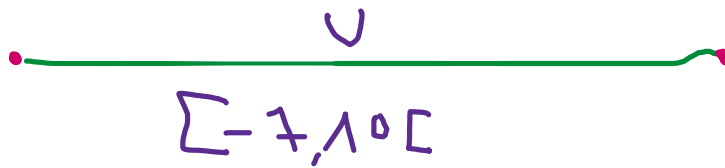
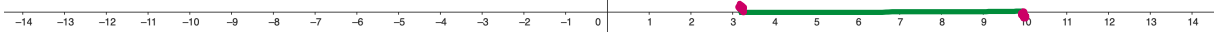
$$[-3, 7]$$

B. BEWERKINGEN MET INTERVALLEN

$A \cup B$

1. Unie van intervallen = OF

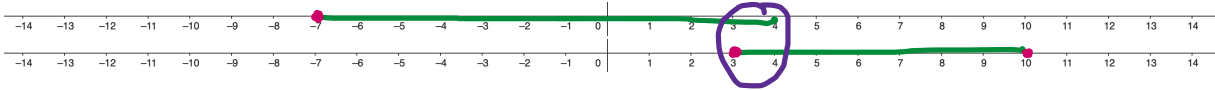
$$]-7,4] \cup]3,10[$$



$]-3,8] \cup]3,10[=$ <p>$\cup]-3,10[$ $-3 < x < 10$</p>	$[-3,8[\cup [4,10] =$
$[-2,5] \cup [5,9] =$ <p>$[-2,9]$</p>	$[-6,9[\cup [9,11] =$
$[-1,4[\cup [7,13] =$	$]-\infty,1[\cup [-3,16] =$ <p>$]-\infty,16]$</p>

2. Doorsnede van intervallen

$$]-7,4] \cap]3,10[\text{ en}$$



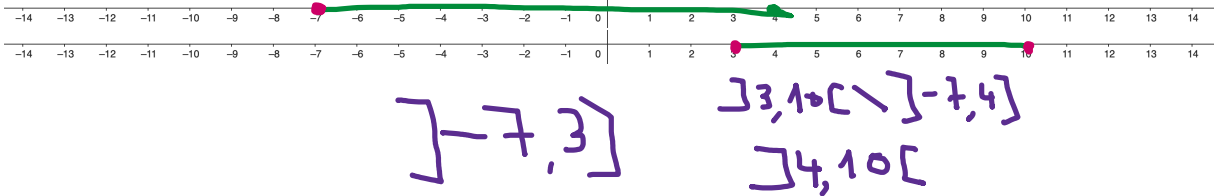
$$]3,4] \quad -3 < x \leq 4$$

$]-3,8] \cap]-5,10[=$ <p>$] -3,8] \quad -3 \leq x < 8$</p>	$[-3,8[\cap [5,10] =$ <p>$[5,8[\quad 5 \leq x < 8$</p>
$[-1,5] \cap [5,9] =$ <p>$\{5\}$ $\{5\}$ $x=5$</p>	$[-1,7[\cap [7,11] =$ <p>$\{7\}$ $\{7\}$ \emptyset</p>
$[-3,8[\cap [9,10] =$ <p>$\{ \}$ $\{ \}$ \emptyset \emptyset $\{ \}$</p>	$] -\infty, -3[\cap [-8,16] =$ <p>$[-8,-3[$</p>

$A \setminus B$ wel A , niet B

3. Verschil van intervallen

$$]-7, 4] \setminus]3, 10[$$



$]-3, 8] \setminus]5, 10[=$ <p>$]-3, 5] \cup]-5, 8[$</p>	$[3, 8[\setminus [2, 10] = \emptyset$ <p>$[2, 10[\setminus [3, 8[=$ $[2, 3[\cup [9, 10]$</p>
$[-1, 7] \setminus [5, 10] =$ <p>$[-1, 5[\cup]7, 10]$</p>	$[-1, 9[\setminus [9, 11] = \emptyset$ <p>$[-1, 9[\cup]9, 11]$</p>
$[1, 6[\setminus [9, 11] = [1, 6[$ <p>$\cap = \emptyset$ $[1, 11]$</p>	$]-\infty, 6[\setminus [-3, 16] =$ <p>$]-\infty, -3[\cup]6, 16]$</p>