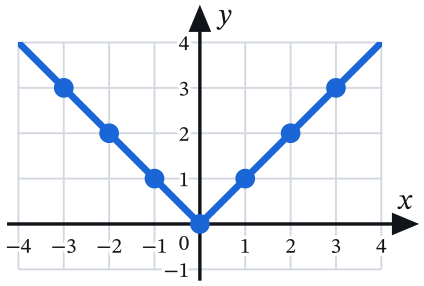
Imena u paru _____ Datum _____

Funkcija apsolutne vrijednosti

Primjer: $f(x) = |x|$



$|x|$ je udaljenost broja x od 0.
Za $x \geq 0$ je $f(x) = x$, a za $x < 0$ je $f(x) = -x$.
Graf je od **dva dijela pravca**, oblika slova V, s vrhom u $(0, 0)$.

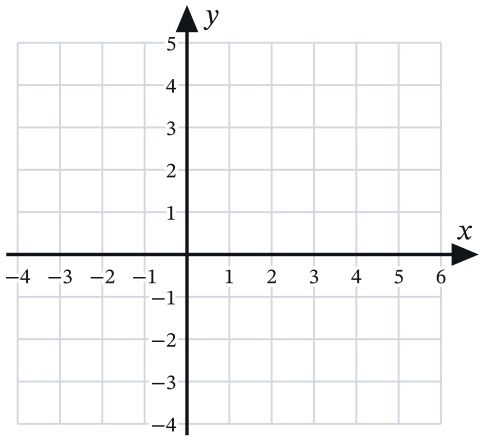
Zapamti

$f(x) = |x - a|$ je udaljenost od x do a: graf je V s vrhom u $(a, 0)$. $f(x) = |x| + b$ pomiče graf za b gore ili dolje. To je funkcija linearna po dijelovima.

1 U PARU Dovršite tablice i nacrtajte oba grafa u isti sustav.

x	-1	0	1	2	3	4	5
$\lvert x-2\rvert$	☐	☐	☐	☐	☐	☐	☐

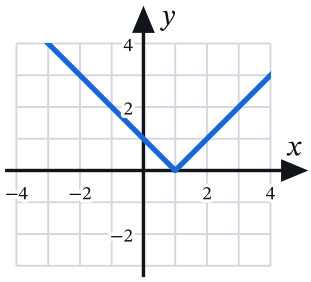
x	-3	-2	-1	0	1	2	3
$\lvert x\rvert - 3$	☐	☐	☐	☐	☐	☐	☐



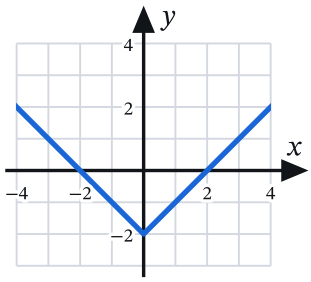
Imena u paru _____ Datum _____

2 SAMOSTALNO Spoji formulu i graf. Upiši slovo grafa.

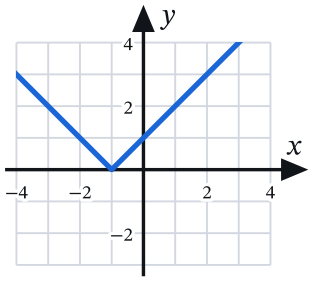
A



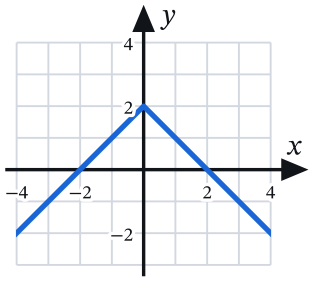
B



C

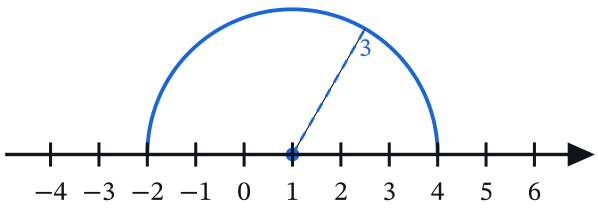


D



$f(x) = |x + 1|$ ☐ $f(x) = |x| - 2$ ☐ $f(x) = |x - 1|$ ☐ $f(x) = -|x| + 2$ ☐

3 SAMOSTALNO Riješi pomoću grafa $f(x) = |x - 1|$: gdje je graf na visini 3, a gdje ispod nje? Usporedi s polukružnicom sa središtem 1 i polumjerom 3.



$|x - 1| = 3$: ☐

$|x - 1| < 3$: ☐

4 SAMOSTALNO Zapiši $f(x) = |x - 2|$ bez apsolutne vrijednosti.

$f(x) =$ ☐ za $x \geq 2$, $f(x) =$ ☐ za $x < 2$

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Upiši $|x - 2|$ i $|x| - 3$ i provjeri svoje grafove.

★ SAMOSTALNO **Izlazna kartica.** Vrh grafa $f(x) = |x + 4|$ je u točki (☐, 0)