Dividing Negative and Positive Numbers

Negative numbers are less than zero and written with a sign, e.g. (-3). Positive numbers are greater than zero and usually don't have a sign, e.g. 4. (Images created using free virtual manipulatives available at Mathsbot.com)
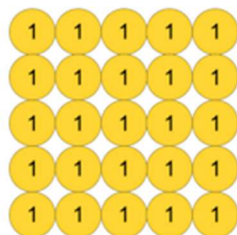
25 ÷ 5 =
What do I multiply by 5 to get 25?
5 x 5 = 25
Add five lots of 5
So, 25 ÷ 5 = 5

25 ÷ (-5) =
What do I multiply by (-5) to get 25?
(-5) x (-5) = 25
Take away five lots of (-5)
So, 25 ÷ (-5) = (-5)
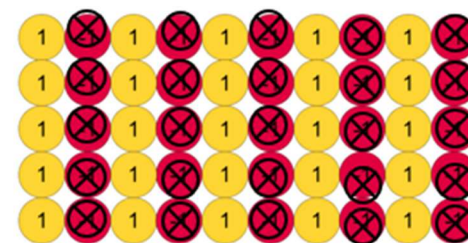
(-25) ÷ 5 =
What do I multiply by 5 to get (-25)?
5 x (-5) = (-25)
Add five lots of (-5)
So (-25) ÷ 5 = (-5)

(-25) ÷ (-5) =
What do I multiply by (-5) to get (-25)?
(-5) x 5 = (-25)
Take away five lots of five
So (-25) ÷ (-5) = 5