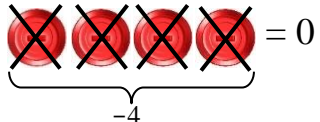


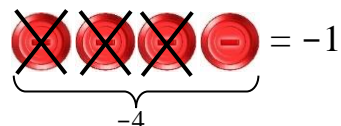
Check Your Answers on Subtracting Integers!

As in Adding Integers, a black chip or circle will represent +1 and a red chip or circle will represent -1. Manipulatives such as checkers can easily be used to mirror the processes presented. Using this visual approach, it is possible to determine the difference without memorizing rules.

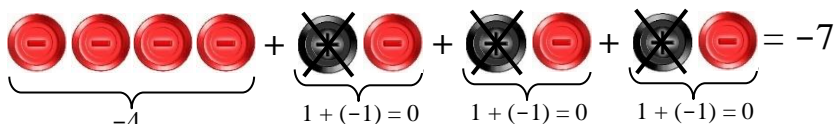
1. 0 Subtraction is usually introduced as “taking away” the amount to be subtracted. To model $(-4) - (-4)$, begin with 4 red chips. Subtract (-4) by taking away 4 red chips as shown to the right.



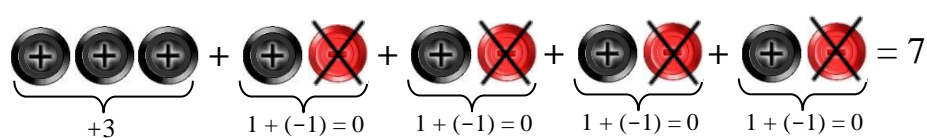
2. -1 To model $(-4) - (-3)$, begin with 4 red chips. Subtract (-3) by taking away 3 red chips as shown to the right.



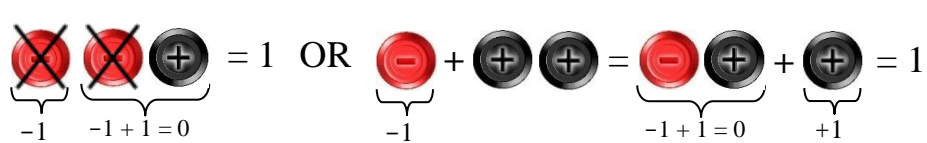
3. -7 Again begin with 4 red chips to model $(-4) - 3$. In this case, 3 black chips would be needed to subtract +3. Add 3 zeros which are black-and-red pairs in order to take away 3 black chips.



4. 7 To model $3 - (-4)$, begin with 3 black chips. To subtract (-4) , 4 red chips would be needed. Add 4 zeros which are black-and-red pairs in order to take away 4 red chips.



5. 1 Did you see in questions 3 & 4 why subtraction is often redefined as “adding the opposite”? This means that $-1 - (-2)$ could be written as $-1 + 2$. Rather than taking away 2 red chips, add 2 black chips.



6. 5 Because subtraction is often redefined as “adding the opposite”, $2 - (-3)$ could be written as $2 + 3$. No need for chips!

7. -2 Can you mentally picture those positives and negatives without actually seeing those “chips”?

8. -9 Even though the numbers are larger, no problem for you! One additional note: Subtraction is not commutative ($2 - 3 \neq 3 - 2$) so be careful changing the order unless you consider that the sign refers to the term that it precedes. In other words, $2 - 3 = 2 + (-3)$ which equals -1 and $3 - 2 = 3 + (-2)$ which equals +1.

9. 2 Remember that you cannot distribute the negative into *absolute value bars*! Take the absolute value first and then combine:
 $|6| - |(-4)| = 6 - 4 = 2$

10. -4 Well done!

Perfect score? Yes! You’ve got this!! You’re ready to move on to the next section!!!