

i. $2 + 3 = \underline{\quad}$ $-2 + -5 = \underline{\quad}$ $-4 + 1 = \underline{\quad}$

5. Again following the pattern established with whole numbers, we may want to think of subtraction as "take-away". If we wanted to subtract -2 from 4, we would want to "take away" two red chips from our representation of 4. If 4 is represented by four black chips there are no red chips to take away. How can we represent 4 in a way that uses 2 red chips? black, 2 red. If we take away 2 red chips, what is left? What does this suggest that the answer to $4 - (-2)$ should be?

6. Use this technique to solve:

$-4 - (-3) = \underline{\quad}$ $1 - 3 = \underline{\quad}$ $-3 - (-5) = \underline{\quad}$

7. Now solve the subtractions above by employing the chips with the "missing addend" model of subtraction. Was this easier or harder than employing the "take-away" model?
8. If we think of multiplication in term of the "set of sets" model how would we represent the product $3 \times (-2)$ in terms of chips?

This suggests that $3 \times (-2) = \underline{\quad}$

Use this technique to solve:

$4 \times (-3) = \underline{\quad}$ $6 \times (-1) = \underline{\quad}$ $0 \times (-2) = \underline{\quad}$