8.1 Exploring Integer Multiplication

Sign Rules For Multiplication:

$(\boldsymbol{POSITIVE})\times(\boldsymbol{POSITIVE}) =$ _____

$(\boldsymbol{POSITIVE})\times(\boldsymbol{NEGATIVE}) =$ _____

$(\boldsymbol{NEGATIVE})\times(\boldsymbol{POSITIVE}) =$ _____

$(\boldsymbol{NEGATIVE})\times(\boldsymbol{NEGATIVE}) =$ _____

Product →

Brackets → Side by side brackets may be used to indicate that multiplication is taking place.

$$\mathbf{5\times2 = (5)\times(2) = (5)(2) = 10}$$

Ex. 1 Determine each Product.

a) $2\times3 =$

b) $(-5)\times(2) =$

c) $(3)(-4) =$

d) $(-4)(-4) =$

Multiplication as Repeated Addition

$3\times5 =$

$5\times3 =$

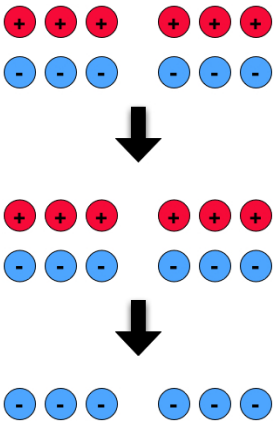
8.1 Exploring Integer Multiplication

Modeling Multiplication with Integer Chips

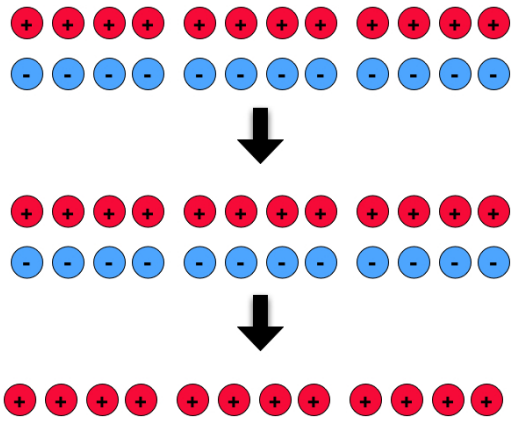
R = +1 B = -1 **Zero Pair →** R B

Ex. 2 What multiplication statement does each set of diagrams represent?

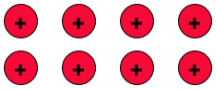
a)



b)



c)



d)