Adding, Subtracting, Multiplying, and Dividing Integers Rules

Adding Integers:

* If the signs are the same; keep the sign of the two addends and add





* If the signs are different, keep the sign of the larger absolute value (the one farther from zero) and subtract



Subtracting Integers:

* “Add the Opposite”
	+ 1) Change the operation to addition
	+ 2) Change the sign of the subtrahend to its opposite
	+ 3) Follow the rules for addition

 

Multiplication and Division of Integers:

Multiplying Integers:

* SAME SIGNS:
	+ The product is always positive
		- $2×6=12$
		- $-4\left(-3\right)=\left(-12\right)$
* DIFFERENT SIGNS:
	+ The product is always negative
		- $-2\left(4\right)=-8$
		- $3\left(-1\right)=-3$

Dividing Integers:

* SAME SIGNS:
	+ The quotient is always positive
		- $-12÷(-2)=6$
		- $6÷3=2$
* DIFFERENT SIGNS:
	+ The quotient is always negative
		- $-12÷3=-4$
		- $2÷\left(-1\right)=-2$

