

How to multiply and divide integer numbers

RULES OF MULTIPLICATION:

Signs of numbers	Example	Conclusion
$(+) \cdot (+) = (+)$	$5 \cdot 2 = 10$	FOR TWO INTEGERS WITH EQUAL SIGNS, THE RESULT IS POSITIVE
$(-) \cdot (-) = (+)$	$(-5) \cdot (-2) = 10$	
$(+) \cdot (-) = (-)$	$5 \cdot (-2) = -10$	FOR TWO INTEGERS WITH DIFFERENT SIGNS, THE RESULT IS NEGATIVE
$(-) \cdot (+) = (-)$	$(-5) \cdot 2 = -10$	

RULES OF DIVISION:

Signs of numbers	Example	Conclusion
$(+) \div (+) = (+)$	$10 \div 2 = 5$	FOR TWO INTEGERS WITH EQUAL SIGNS, THE RESULT IS POSITIVE
$(-) \div (-) = (+)$	$(-10) \div (-2) = 5$	
$(+) \div (-) = (-)$	$10 \div (-2) = -5$	FOR TWO INTEGERS WITH DIFFERENT SIGNS, THE RESULT IS NEGATIVE
$(-) \div (+) = (-)$	$(-10) \div 2 = -5$	

As you can see, the rules of signs for multiplication and division are the same. So, we just need to keep in mind the following conclusions:

- When we multiply or divide two integers with **EQUAL SIGNS**, the result is **POSITIVE**.
- When we multiply or divide two integers with **DIFFERENT SIGNS**, the result is **NEGATIVE**.

LET'S PRACTICE:

a) $7 \cdot 8 = \boxed{}$
b) $(-6) \cdot (-9) = \boxed{}$
c) $5 \cdot (-7) = \boxed{}$
d) $(-6) \cdot 7 = \boxed{}$
e) $(-8) \cdot (-6) = \boxed{}$
f) $(-9) \cdot 7 = \boxed{}$
g) $9 \cdot 8 = \boxed{}$
h) $5 \cdot (-8) = \boxed{}$

i) $45 \div 5 = \boxed{}$
j) $(-42) \div 7 = \boxed{}$
k) $(-48) \div (-6) = \boxed{}$
l) $72 \div (-8) = \boxed{}$
m) $(-63) \div 9 = \boxed{}$
n) $35 \div (-7) = \boxed{}$
o) $(-54) \div (-9) = \boxed{}$
p) $(-56) \div 8 = \boxed{}$

