

WORKSHEET 1.18: MULTIPLYING MORE THAN TWO INTEGERS

To multiply more than two integers, follow the steps below:

1. Start with the first two integers and multiply their absolute values.
2. Determine the sign.
 - If the integers are both positive or both negative, the product is positive.
 - If one integer is positive and the other is negative, the product is negative.
3. Multiply the absolute value of the product of the first two integers by the absolute value of the third. Follow the same rules for finding the correct sign. Continue with this process if there are more integers to multiply.
4. If zero is a factor in the problem, the product is zero.

EXAMPLES

$-3 \times (-4) \times (-5) =$	$3 \times (-8) \times (-2) =$	$-4 \times 0 \times 5 =$
$12 \times (-5) =$	$-24 \times (-2) =$	0
-60	48	

DIRECTIONS: Find the products.

1. $6 \times (-8) \times 3$
2. $-15 \times 0 \times 9$
3. $-7 \times (-1) \times 4$
4. $-1 \times (-3) \times 12$
5. $14 \times 5 \times (-4)$
6. $-3 \times (-9) \times (-8)$
7. $15 \times 4 \times 3$
8. $-4 \times (-5) \times 6 \times (-1)$
9. $4 \times (-3) \times 2$
10. $-3 \times (-3) \times (-3)$
11. $-15 \times (-7) \times 0$
12. $5 \times (-4) \times (-2)$



CHALLENGE: Is the procedure used to multiply the following integers correct? Explain your answer. $-3 \times 4 \times (-6) \times 2 = -12 \times (-12) = 144$

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EXAMPLES

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$12 \times (-5) =$	$-24 \times (-2) =$	0
-60	48	

DIRECTIONS: Find the products.

1. $6 \times (-8) \times 3$

-144

2. $-15 \times 0 \times 9$

0

3. $-7 \times (-1) \times 4$

28

4. $-1 \times (-3) \times 12$

36

5. $14 \times 5 \times (-4)$

-280

6. $-3 \times (-9) \times (-8)$

-216

7. $15 \times 4 \times 3$

180

8. $-4 \times (-5) \times 6 \times (-1)$

-120

9. $4 \times (-3) \times 2$

-24

10. $-3 \times (-3) \times (-3)$

-27

11. $-15 \times (-7) \times 0$

0

12. $5 \times (-4) \times (-2)$

40



CHALLENGE: Is the procedure used to multiply the following integers correct? Explain your answer. $-3 \times 4 \times (-6) \times 2 = -12 \times (-12) = 144$

Yes. The order of multiplying factors does not affect the product.