

Adding Integers

There are 2 different cases for adding integers

Case 1: Both integers have the same sign:

- Procedure:
1. The sign for the answer is the same as the sign of the 2 numbers being added.
 2. Add the numbers together. (ignoring the signs)

Examples:

Positive integers:	$4 + 6 = 10$	Answer is positive since both numbers are positive, just add the numbers together.
Negative integers:	$(-3) + (-2) = -5$	Answer is negative since both numbers are negative, add 3+2 (ignoring negative signs) for the answer.

Case 2: The integers have different signs:

- Procedure:
1. The sign for the answer is the same as the sign of the "larger" number.
 2. Take the difference of the numbers. (ignoring the signs)

Examples:

Question:	$(-5) + 7 =$	
Assign the sign for the answer:		(since the 7 is positive, the answer is positive, you don't have to write the '+' sign)
Take the difference:	$7 - 5 = 2$	(always subtract the "smaller" number from the "larger" number)
Final answer:	$(-5) + 7 = 2$	

Question:	$5 + (-7) =$	
Assign the sign for the answer:	-	(since the 7 is negative, the answer is negative)
Take the difference:	$7 - 5 = 2$	(always subtract the "smaller" number from the "larger" number)
Final answer:	$5 + (-7) = -2$	

Practice! Write the question without bracket first, then answer. Ex: $2 + (-7) = 2 - 7 = -5$

1 + (-4) = -3	0 + (-2) = -2	9 + (-6) = 3	0 + (-7) = -7
(-4) + (-5) = -9	0 + (-8) = -8	3 + (-5) = -2	9 + (-2) = 7
(-4) + (-5) = -9	(-7) + (-8) = -15	(-6) + (-2) = -8	6 + (-1) = 5

Integer Problems

Integer adding (more practice)

$(-2) + (-4) = -6$	$(-2) + 6 = 4$	$(-3) + 7 = 4$	$0 + 1 = 1$
$1 + (-6) = -5$	$0 + 5 = 5$	$(-7) + 8 = 1$	$7 + 3 = 10$
$5 + (-1) = 4$	$0 + 2 = 2$	$(-5) + 7 = 2$	$(-2) + (-2) = -4$
$(-4) + (-7) = -11$	$0 + 5 = 5$	$(-1) + 9 = 8$	$9 + 3 = 12$
$2 + (-6) = -4$	$5 + 3 = 8$	$(-6) + 4 = -2$	$0 + 9 = 9$
$(-6) + (-5) = -11$	$(-4) + 5 = 1$	$3 + 7 = 10$	$3 + 3 = 6$
$(-1) + (-2) = -3$	$2 + 6 = 8$	$1 + (-6) = -5$	$6 + 7 = 13$
$(-9) + (-9) = -18$	$0 + 8 = 8$	$5 + 2 = 7$	$(-6) + (-8) = -14$
$(-8) + (-4) = -12$	$(-3) + 4 = 1$	$(-4) + (-4) = -8$	$(-3) + 0 = -3$
$4 + (-8) = -4$	$(-7) + 9 = 2$	$(-8) + 8 = 0$	$(-4) + (-1) = -5$
$1 + (-1) = 0$	$1 + 9 = 10$	$(-1) + (-5) = -6$	$(-5) + (-4) = -9$
$(-4) + (-8) = -12$	$(-9) + 5 = -4$	$7 + (-1) = 6$	$(-7) + (-6) = -13$
$0 + (-9) = -9$	$1 + 2 = 3$	$8 + 5 = 13$	$(-3) + 8 = 5$
$8 + (-7) = 1$	$1 + 0 = 1$	$(-6) + 5 = -1$	$3 + (-7) = -4$
$9 + (-9) = 0$	$(-8) + 1 = -7$	$(-4) + (-2) = -6$	$0 + (-3) = -3$
$(-5) + (-8) = -13$	$(-3) + 1 = -2$	$(-4) + 5 = 1$	$2 + (-2) = 0$
$5 + (-6) = -1$	$0 + 0 = 0$	$9 + (-9) = 0$	$4 + 6 = 10$

Subtracting Integers

There are 2 different cases for subtracting integers

Case 1: Subtracting a positive:

- Procedure:
1. The operation becomes subtraction.
 2. Use the same procedure as adding integers.

Examples:

Question: $4 - (+6) =$

Change sign to subtraction: $4 - 6 =$

Use adding integers procedure: $4 - 6 = -2$

Question: $-6 - (+2) =$

Change sign to subtraction: $-6 - 2 =$

Use adding integers procedure: $-6 - 2 = -8$

Case 1: Subtracting a negative:

- Procedure:
1. The operation becomes addition.
 2. Use the same procedure as adding integers.

Examples:

Question: $4 - (-6) =$

Change sign to addition: $4 + 6 =$

Use adding integers procedure: $4 + 6 = 10$

Question: $-3 - (-2) =$

Change sign to addition: $-3 + 2 =$

Use adding integers procedure: $-3 + 2 = -1$

Practice! Write the question without bracket first, then answer. Ex: $2 - (-7) = 2 + 7 = 12$

$4 - (-8) = 12$	$5 - 4 = 1$	$3 - (-5) = 8$	$6 - 4 = 2$
$0 - (-2) = 2$	$(-6) - 1 = -7$	$(-4) - (-4) = 0$	$(-5) - 2 = -7$
$(-6) - (-3) = -3$	$7 - 4 = 3$	$(-7) - (-4) = -3$	$(-1) - 7 = -8$

Integer Problems

Integer subtracting (more practice)

$(-2) - (-9) = 7$	$7 - 1 = 6$	$(-5) - 0 = -5$	$7 - 7 = 0$
$(-7) - (-9) = 2$	$(-9) - 1 = -10$	$(-2) - (-8) = 6$	$(-8) - 7 = -15$
$(-4) - (-6) = 2$	$(-6) - 5 = -11$	$(-5) - (-7) = 2$	$(-8) - (-8) = 0$
$(-3) - (-7) = 4$	$6 - 3 = 3$	$4 - (-3) = 7$	$(-8) - 3 = -11$
$(-2) - (-4) = 2$	$(-5) - 7 = -12$	$(-8) - (-8) = 0$	$2 - 3 = -1$
$(-8) - (-6) = -2$	$(-8) - 7 = -15$	$(-9) - 8 = -17$	$0 - 1 = -1$
$7 - (-9) = 16$	$(-8) - 3 = -11$	$1 - (-1) = 2$	$7 - 5 = 2$
$(-4) - (-7) = 3$	$7 - 6 = 1$	$(-5) - (-8) = 3$	$(-2) - 3 = -5$
$(-3) - (-3) = 0$	$(-6) - 3 = -9$	$(-8) - 9 = -17$	$(-5) - (-5) = 0$
$(-9) - (-3) = -6$	$(-1) - 8 = -9$	$2 - 0 = 2$	$(-8) - (-3) = -5$
$(-1) - (-5) = 4$	$2 - 7 = -5$	$1 - 5 = -4$	$(-7) - 1 = -8$
$6 - (-3) = 9$	$(-7) - 1 = -8$	$(-5) - 8 = -13$	$(-9) - 6 = -15$
$(-3) - (-7) = 4$	$(-2) - 6 = -8$	$2 - 5 = -3$	$(-1) - 0 = -1$
$0 - (-3) = 3$	$0 - 7 = -7$	$6 - 9 = -3$	$(-5) - 8 = -13$
$6 - (-8) = 14$	$(-8) - 3 = -11$	$2 - (-1) = 3$	$(-4) - (-2) = -2$
$4 - (-5) = 9$	$5 - 1 = 4$	$(-9) - 0 = -9$	$5 - (-1) = 6$