5th Basic

6th Advanced

Helping With Math

USA GRADES

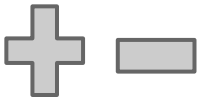
Subtraction of Integers with Unlike Signs

Suitable for students **aged 9-11**

This pack is suitable for learners aged 9-11 years old or 5th to 6th graders (USA). The content covers fact files and relevant basic and advanced activities involving subtraction of integers with unlike signs.

Integers are whole-valued positive or negative numbers.

UNLIKE SIGN INTEGERS involve the signs of



in all of the four operations in Mathematics. In subtraction, we subtract numbers then take the sign of the bigger digit for the final answer.

Example #1:

7 - (-9)

= 7 + 9

= 16

Example #2:

-7 - 9

= -16

RULES IS SUBTRACTING INTEGERS WITH UNLIKE SIGNS

Subtraction with unlike signs may be in the following given form: (+) - (-) or (-) - (+).

SUBTRACTING INTEGERS WITH UNLIKE SIGNS

To subtract integers, change the sign on the integer that is to be subtracted. Subtract the smaller absolute value from the larger absolute value. Remember: KCC! --- Keep, Change, Change.

1. **K**eep the sign of the minuend
2. **C**hange the operation symbol (minus sign to plus sign), and
3. **C**hange the sign of the subtrahend.

INTEGER SIGN	OPERATION	ANSWER SIGN
(+) - (-)	Add	(+)
(-) - (+)	Add	(-)

EXAMPLES:

48 - (-69) = 117

-82 - 37 = -119

96 - (-25) - 13= 108

During a cold front, the temperature in Seattle dropped from 7°C to -5°C. How much is the change in temperature?

7 - (-5) = 12

Therefore, the temperature at Seattle changed at 12°C.

EXERCISE

One of the coldest temperatures recorded at Seattle was -13 degree celsius. Meanwhile, one of the warmest ever recorded in the place was 34℉. How many degrees difference are there between the coldest and warmest temperature records?

Solution:

1. 105 - (-64) =
2. 385 - (-186) =
3. -472 - 298 =
4. -569 - 354 =
5. 444 - (-123) - 88 =

Solution:

TABLE OF ACTIVITIES

Ages 9-10 (Basic)		5th Grade
1	Winter Tasks	
2	Cloudscapes	
3	Moonset with the Integers	
4	The Weathercock	
5	Beach Days	
Ages 10-11 (Advanced)		6th Grade
6	A Nice Sunny Day	
7	Autumn or Winter	
8	Weather Disturbances	
9	Weather Puzzle	
10	Water Reflection	

WINTER TASKS

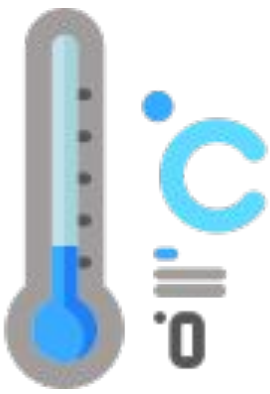
G5
Basic

Keep your body a little bit warmer by completing these winter tasks. Make sure to show your solution.

1. 909 - (-374) =

2. 437 - (-147) =

3. 991 - (-176) =



4. 709 - (-208) =

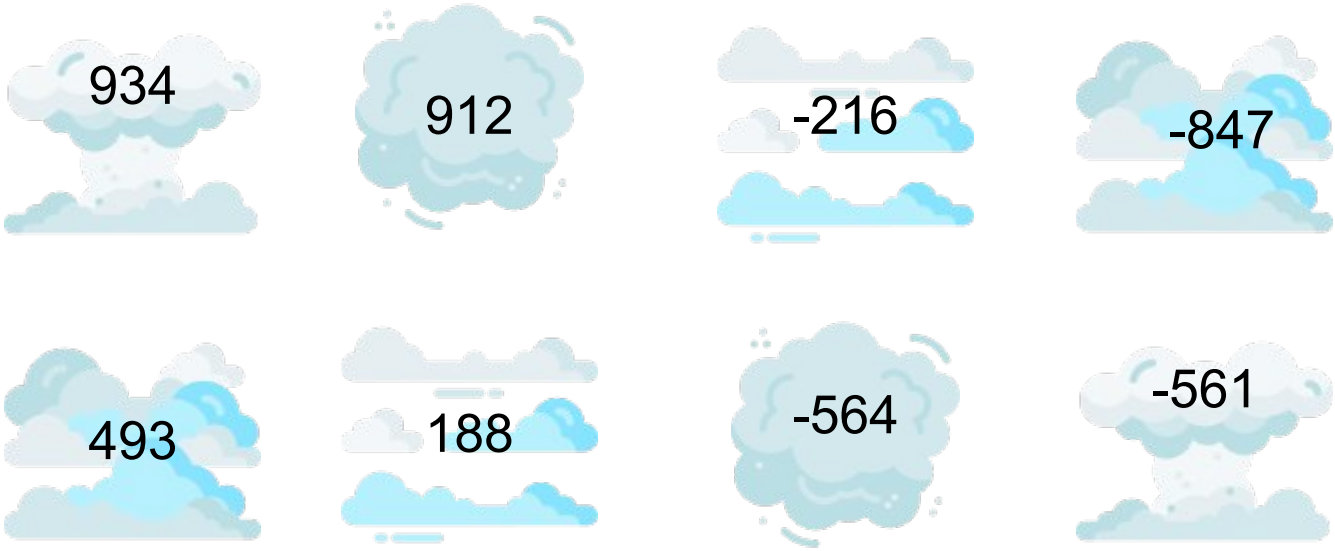
5. 823 - (-465) =

6. 251 - (-203) =

CLOUDSCAPES

G5 Basic

Be familiarized with the different types of clouds by finding its pair and then answer the following questions.



1.Find the difference of the Cumulonimbus clouds.

2.Find the difference of the Nimbostratus clouds.

3.Find the difference of the Stratus clouds.

4.Find the difference of the Stratuscumulus clouds.

MOONSET WITH THE INTEGERS

G5 Basic

Witness and celebrate the moonset with the integers by answering the word problems below. Show your solution.

1. What is the difference of the numbers that are 543 units away from the right of zero and 102 units away from the left of zero?

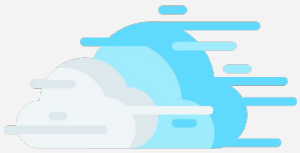
2. Is the difference of -435 and 364 greater than the sum of 254 and -555? Prove your answer.

3. How many units away from zero is the difference of -569 and 295 located?

THE WEATHERCOCK

G5 Basic

Complete the weathercock's forecast by finding and fulfilling the missing integer of the subtraction of unlike signs.



1. -520 - _____ = -594

2. 577 - (-540) = _____

3. _____ - (-322) = 1,184

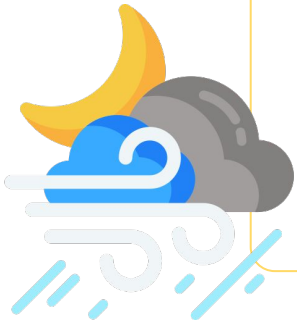
4. 895 - _____ = 1,731

5. _____ - (-520) = 1,083

6. -871 - 109 = _____

Additional question:

1. Why is learning and understanding subtraction of integers with unlike signs important?



BEACH DAYS

G5 Basic

Mark your calendars as summer begins to prosper! Organize it by finding the difference of the integers in the 1st row with the integers in the 1st column and fill them in the squares provided.

-	699	502
-497		
-438		

-	-769	-859
401		
506		

-	-793	-543
563		
536		

-	353	874
-14		
-655		

A NICE SUNNY DAY

G6 Advanced

A nice sunny day will be perfect to answer the following integers. Solve the following carefully. Write your answer on the space provided.

8 8 0 (-6 4 9) − (-2 3 1)	8 3 4 (-1 8 6) − 6 4 8	(-4 7 6) 3 7 5 − 1 0 1
(-2 8 1) 9 2 − (-1 8 9)	8 2 1 3 9 − (-7 8 2)	(-7 1 6) (-6 6 4) − (-7 3 2)

AUTUMN OR WINTER

G6 Advanced

What is Meredith's favorite season? Identify the word by subtracting the following.

-114	896	290	-1,792	-1,722	218

A= -557 - 121 - 436 = -1,114

E= -861 - 513 - 348 = -1,722

I= 448 - (-209) - (-239) = 896

M= 961 - (-173) - (-788) = 1,922

N= 495 - (-145) - 350 = 290

R= 247 - (-109) - 138 = 218

T= (-896) - 542 - 354= -1,792

U= (-959) - 391 - 568 = -1,918

W= (-120) - 57 - (-63) = -114

WEATHER DISTURBANCES

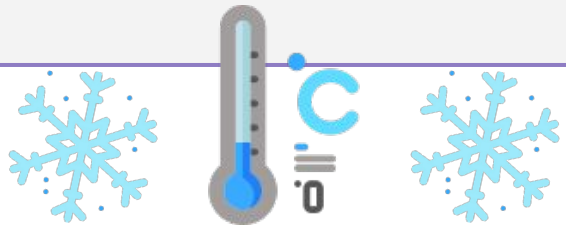
G6 Advanced

Solve these temperature-related word problems. Apply your understanding of this lesson to answer them correctly.

1. A certain town's temperature, in Celsius, are recorded in three days as follows: -9, 3, and -5. Solve for the daily differences.

2. Derek noticed that yesterday's temperature was 14 degree celsius. He said that the temperature two weeks ago was - 8 degrees cooler than yesterday's record. What was the temperature two weeks ago?

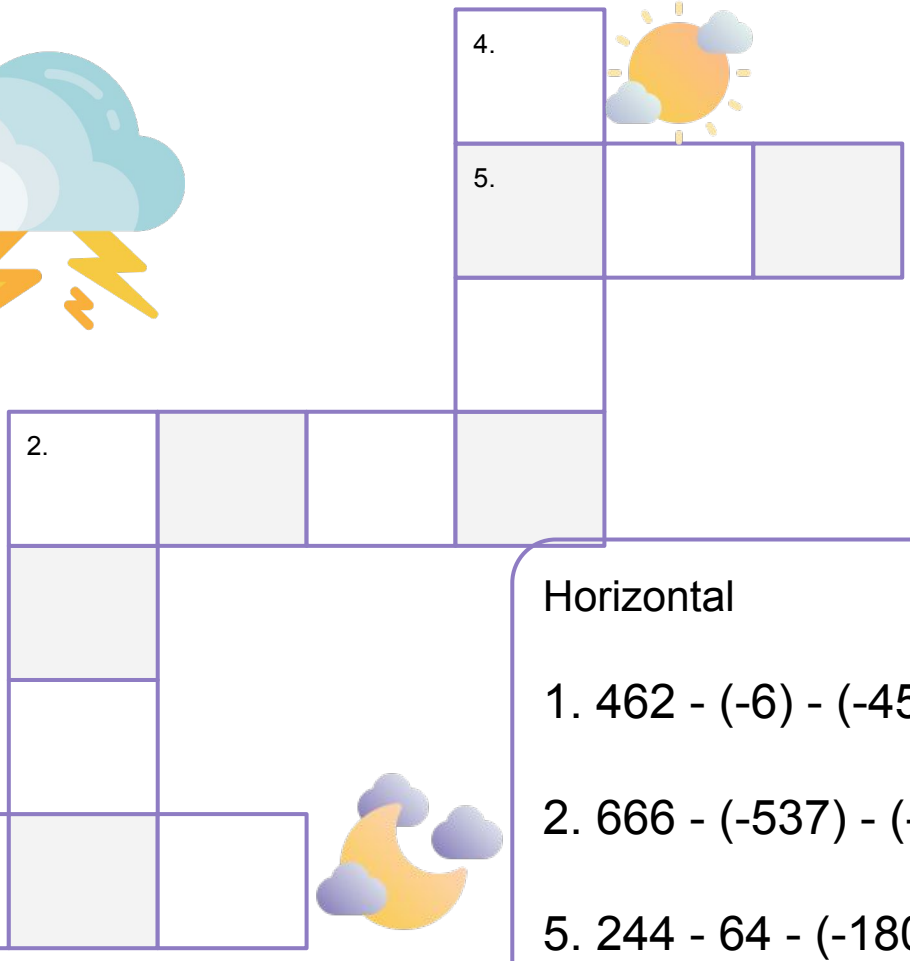
3. Create a five-day temperature forecast that has -3 degree celsius interval. Start with 6 degrees celsius.



WEATHER PUZZLE

G6 Advanced

Help the forecaster track the weather by solving the following subtraction sentences then write your answer on the crossword puzzle above. The numbers before the given will serve as your guide.



Horizontal

1. 462 - (-6) - (-456) =

2. 666 - (-537) - (-129) =

5. 244 - 64 - (-180)

Vertical

2. 666 - (-537) - (-129) =

4. 916 - 261 - (-655) =

WATER REFLECTION

G6 Advanced

See your own water reflection by simply answering the questions below.

1. Give three to four life examples or applications related to the theme where this lesson can be applied.

2. What is the learning significance of subtraction of integers with unlike signs? How is it beneficial for you?

3. Did you enjoy this lesson? Share your enjoyable moment/s while learning this lesson.

ANSWER GUIDE

Activity 1

1. 1,283
2. 584
3. 1,167
4. 917
5. 1,288
6. 454

Activity 2

1. 1,495
2. 1,476
3. -404
4. -1,340

Activity 3

1. 605 units
2. 2. -799 vs 301, the second answer is greater than the first 3. 864 units

Activity 4

1. 74
2. 1,117
3. 862
4. -869
5. 563
6. -980

Activity 5

1. 1,196, 999
   1,137, 940
2. -1,170, -1,260
   -1,275, -1,365
3. -1,356, -1,106
   -1,329, -1,079
4. 367, 888
   1,008, 1,529

Activity 6

1. 1,760
2. 372
3. -952
4. -184
5. 1,564
6. 680

Activity 7

A= -1,114
E=-1,722
I=896
M=1,922
N=290
R=218
T=-1,792
U=-1,918
W=-114
Word: Winter

ANSWER GUIDE

Activity 8

1. Day 1 : 3 - (-9) = 12
   Day 2: - 5 - 3 = - 8
2. 2. 14 - (-8) = 22 degrees celsius
3. 3. 6 C, 3 C, 0 C, -3 C, -6 C

Activity 9

1. 924
2. 1,332
3. 1,870
4. 1,310
5. 360

Activity 10

Answers may vary

Copyright Notice

This resource is licensed under the Creative Commons Attribution-NonCommercial 4.0 International license.

You are free to:

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material

Under the following terms:

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- **NonCommercial** — You may not use the material for commercial purposes.

For more information on this license, visit the following link:

http://creativecommons.org/licenses/by-nc/4.0/

Where possible, free-use images are sourced from online repositories such as Wikipedia and Wikimedia Commons. References and sources for images are provided in the speaker notes section of this document.

Thank you!

Thank you

Thank you so much for purchasing and downloading this resource.

We hope it has been useful for you in the classroom and that your students enjoy the activities.

For more teaching and homeschooling resources like this, don't forget to come back and download the new material we add every week!

Thanks for supporting **Helping With Math**. We can provide teachers with low-cost, high-quality teaching and homeschooling resources because of our loyal subscribers and hope to serve you for many years to come.

- The Entire Helping With Math Team :)