5th Basic

6th Advanced

Helping With Math

USA GRADES

Addition 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 addition of integers with unlike signs.

INTEGERS

are whole-valued positive or negative numbers which are generated from the set of counting numbers.

UNLIKE SIGN INTEGERS

involve the signs of + −

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

Let us aim for the olympic medal by learning the addition with unlike signs!

Example:

$-25 + 5 = -20$

$18 + (-9) = 9$

INTEGERS

Addition with unlike signs involve both positive (+) and negative (-) symbols.

It may be in the following given form: (+) + (-) or (-) + (+)

ADDING INTEGERS WITH UNLIKE SIGNS

To add integers with different signs, get the difference between their absolute values and use the sign of the integer with higher value in the sum.

EXAMPLES:

-29 + 35 = 6

82 + -51 = 31

-75 + 11 = -64

At 8 am, the temperature in Tokyo was negative four degrees Celsius. At noon, the temperature rose nine degrees. What was the temperature at noon?

-4 + 9 = 5

Therefore, the temperature at noon was five degrees.

PRACTICE EXERCISES

EXERCISE:

The Olympic champion, Bolt, owns a submarine. It is situated 413 feet below sea level. If it rises 132 feet, what is its new position?
Solution:

1. 102 + -65 =
2. 99 + -47 =
3. 14 + -23 + -11 =
4. -118 + 21 =
5. -72 + -28 + 10 =

Solution:

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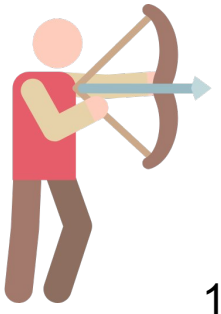
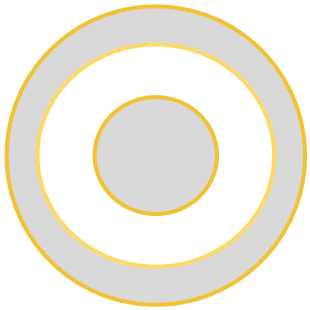
ARCHERY

G5
Basic

Ace the target by distinguishing if the given is correct or not. Write T if the statement is true. Write F if the statement is false.



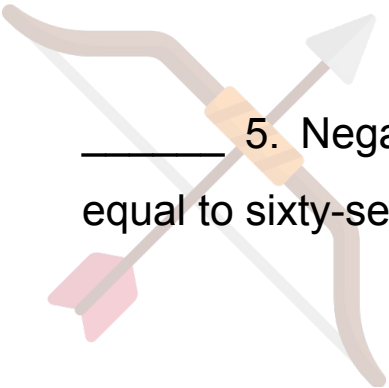


_____ 1. One hundred sixty-four plus negative fifty-eight is equal to negative one hundred six.

_____ 2. Negative one hundred twenty-one plus sixty-three is equal to fifty-eight.

_____ 3. Fifty-seven plus negative one hundred nineteen is equal to negative sixty-two

_____ 4. One hundred eight plus negative ninety-two is equal to sixteen.



_____ 5. Negative one hundred sixty-two plus ninety-five is equal to sixty-seven.

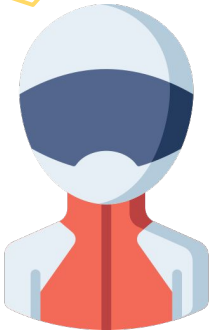
BOBSLEIGH

G5 Basic

Complete your bobsleigh team by finding and computing for the missing addends.

1. 87 + _____ = 52
2. _____ + -76 = -43
3. -100 + 59 = _____
4. _____ + 28 = -113
5. 150 + _____ = 131

6. 137 + -25 = _____
7. -145 + 14 = _____
8. -83 + _____ = 28
9. _____ + -90 = -33
10. 130 + _____ = 83



TRIATHLON

G5 Basic

Compete and compute as fast as you can! Answer the following flashcards in 1 minute.

-201 + 147	-198 + 185
150 + -77	169 + -32

OLYMPIC JOURNAL

G5 Basic

Help Katie summarize the events that happened in Olympics by answering the following word problems below. Show your solution.

1. What is the sum of the numbers that are ten units away from the right of zero and 15 units away from the left of zero?

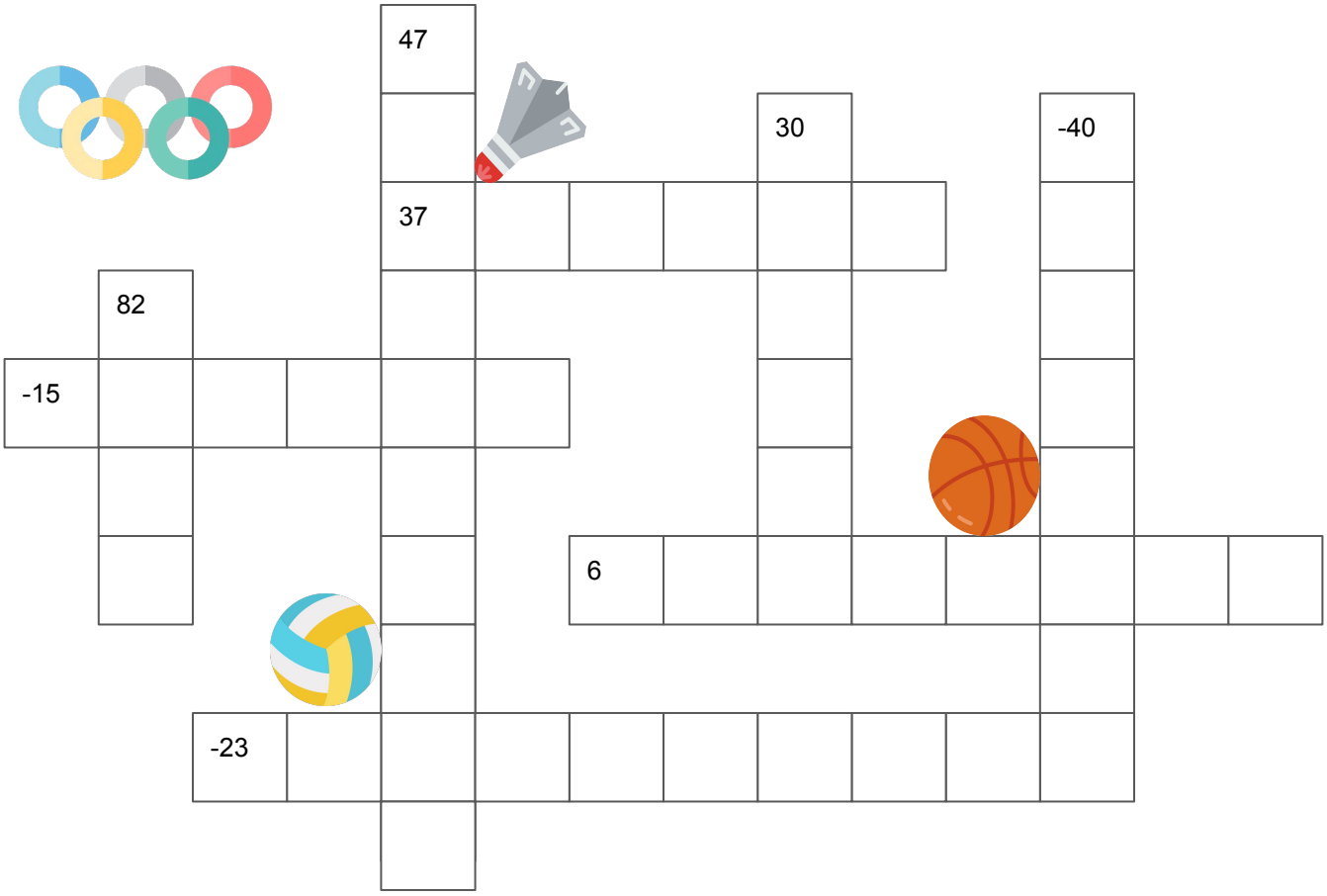
2. Is the sum of -45 and 16 greater than the sum of -58 and 23? Prove your answer.

3. How many units away from zero is the sum of -90 and 47 located?

OLYMPIC GAME LIST

G5 Basic

Complete the official game list by adding the given numbers in bold. The sum is written in the puzzle as your guide.

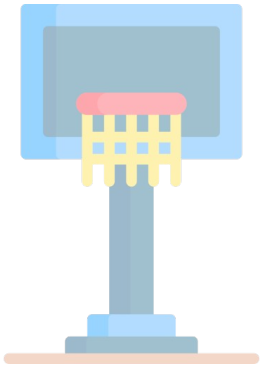


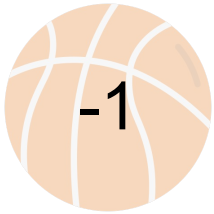
1. **68 + -21**: the players shoot the ball into the hoop
2. **-25 + 55**: played with racket and a yellow ball and players hit it over a net
3. **32 + -72**: there are lot of players and they score kick field goals
4. **-46 + 83**: players only use their feet to kick the ball
5. **99 + -17**: players hit a small white ball using a club
6. **-21 + 6**: played on the ice while using sticks to hit a puck
7. **12 + -6**: players run bases and score home runs
8. **-54 + 31**: can be played on the beach wherein players hit a ball over a net

BASKETBALL

G6 Advanced

Shoot the balls into the hoop by creating an addition sentence based on the sum written on the balls. There are no repetition of numbers in your addition sentence.





Number choices: 2, 4, 5, 8, 15, 17, 18, 20, -16, -15, -13, -12, -11, -7, -3

1. 30 =
2. -1 =
3. 10 =
4. -24 =
5. -3 =

FOOTBALL

G6 Advanced

Complete your football team to be able to compete to the Olympics by solving for the missing addends.

1. 13 + _____ + 39 = 26
2. -19 + 48 + _____ = -38
3. 25 + -50 + -75 = _____
4. _____ + -72 + 113 = 10
5. 55 + _____ + -115 = 25
6. -100 + 40 + 20 = _____
7. _____ + -33 + -101 = -36
8. -194 + _____ + 12 = -227
9. -87 + 109 + _____ = 9
10. 66 + _____ + 190 = 224

1940 SUMMER OLYMPICS

G6 Advanced

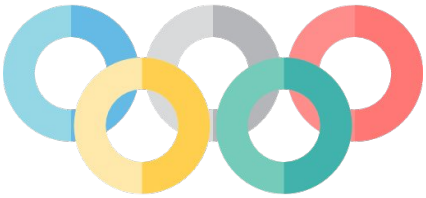
Where did the 1940 Olympics happen? Answer the question below by solving the sum of each letters. Use the sum as your guide to form the word.

K -> -110 + 96 + 47 = _____

O -> 153 + -85 + -33 = _____

T -> -102 + 100 + -98 = _____

Y -> -120 + -18 +54 = _____



The 1940 Summer Olympics were originally scheduled in this place, however, due to world war, it was rescheduled to another country and was eventually cancelled.

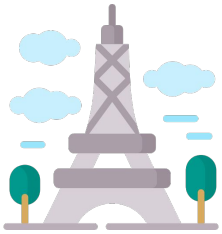
-100	35	33	-84	35

PARIS OLYMPICS

G6 Advanced

The Paris Olympics is few months away from now. Get to know these world-class athletes by answering the problems below.

1. A number is located 45 units away from the right of -2. Is this number greater than 40? Prove your answer.



2. Compare the unit distance of -72 and 28 to the units distance of - 100 and 63.

2. Compare the unit distance of -293 and 170 to the units distance of - 500 and 194.

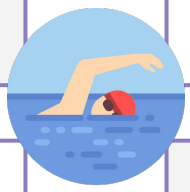
4. How will you describe the characteristics of two numbers that are 50 units away from the left and right of 0?

SWIMMING

G6 Advanced

Show your swimming skills as you show your amazing mathematical ability to solve the following.

-221	-64
+ 19	+ 196
28	-57



-192	21
+ -42	+ -66
93	-199

ANSWER GUIDE

Activity 1

1. F
2. F
3. T
4. T
5. F

Activity 2

1. -35
2. 33
3. -41
4. -141
5. -19
6. 112
7. -131
8. 111
9. 57
10. -47

Activity 3

1. -54
2. -13
3. 73
4. 137

Activity 4

1. The sum is -5.
2. -29 vs -35. The sum of the first pair of addends is greater than the second pair.
3. 3. Their sum is 43 units aways from 0.

Activity 5

1. 47
2. 30
3. -40
4. 37
5. 82
6. -15
7. 6
8. -23

Activity 6

1. 17 + -7 + 20
2. -13 + -3 + 15
3. 4 + -12 + 5
4. 18 + 8 + -16
5. 2 + -11 + -15

ANSWER GUIDE

Activity 7

1. -26
2. -67
3. -100
4. -31
5. 85
6. -40
7. 98
8. -45
9. -13
10. -32

Activity 8

K = 33
O = 35
T = -100
Y = -84
Word: TOKYO

Activity 9

1. Yes it is greater than 40 because the number is 43.
2. 44 vs 37. The first pair has greater sum than the second pair of integers.
3. 123 vs 306. The sum of the second pair is farther from zero compared to the first.
4. They are numbers with opposite signs.

Activity 10

1. -174
2. 75
3. -141
4. -244

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