CLUEY LEARNING

MATHEMATICS: INTEGERS

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Learning Objective: To apply knowledge to explore positive and negative integers.

Adding and Subtracting Positive and Negative Integers

Adding Integers: When adding integers, opposite adjacent signs result in a minus sign, i.e., (+ – or – + → –).

Subtracting Integers: When subtracting a negative number, remember that the two adjacent minus signs cancel each other out, leaving tou with a plus sign, i.e., (– – → +)

Examples

a) 10 + (-12)
b) -1 + (-9)
c) 27 + (-21)
d) 3 – (-5)
e) -1 – (-8)
f) 17 – -26

Drag the number-line onto the whiteboard to aid explanation if needed.

Solution

a) 10 + (-12) = 10 – 12 = -2
b) -1 + (-9) = -1 – 9 = -10
c) 27 + (-21) = 27 - 21 = 6
d) 3 – (-5) = 3 + 5 = 8
e) -1 – (-8) = -1 + 8 = 7
f) 17 – -6 = 17 + 6 = 23

Note: there are parentheses separating the two signs, this is not mandatory, it is there to improve readability.

Evaluate the following questions.

– 7 – (– 23) =	– 14 + 9 =	– 53 + (– 17) =	– 35 + (– 9) =
– 16 – (– 25) =	– 8 – (– 59) =	62 + (– 27) =	23 + (– 14) =

Evaluate the following questions.

– 72 ÷ (– 6) =	– 42 ÷ (– 7) =	56 ÷ (– 8) =	– 36 ÷ (– 4) =
– 9 x (– 11) =	– 3 x 7 =	8 x (– 12) =	5 x (– 8) =

CLUEY LEARNING

MATHEMATICS: ANSWER SHEET

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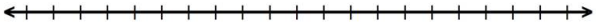

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Note: there are parentheses separating the two signs, this is not mandatory, it is there to improve readability.

Evaluate the following questions.

– 7 – (– 23) =	– 14 + 9 =	– 53 + (– 17) =	– 35 + (– 9) =
– 7 – (– 23) = 16	– 14 + 9 = 5	– 53 + (– 17) = – 70	– 35 + (– 9) = – 44
– 16 – (– 25) =	– 8 – (– 59) =	62 + (– 27) =	23 + (– 14) =
– 16 – (– 25) = 9	– 8 – (– 59) = 51	62 + (– 27) = 35	23 + (– 14) = 9

Evaluate the following questions.

– 72 ÷ (– 6) =	– 42 ÷ (– 7) =	56 ÷ (– 8) =	– 36 ÷ (– 4) =
– 72 ÷ – 6 = 12	– 42 ÷ (– 7) = 6	56 ÷ (– 8) = – 7	– 36 ÷ (– 4) = 9
– 9 x (– 11) =	– 3 x 7 =	8 x (– 12) =	5 x (– 8) =
– 9 x (– 11) = 99	– 3 x 7 = – 21	8 x (– 12) = – 96	5 x (– 8) = – 40