**Student Activity: Adding Integers**

Use in connection with the interactive file, ‘Adding Integers’, on the Student’s CD.

**For example show (6) + (-9) = -3:**

\[
(6) + (-9) = -3
\]

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1. Using the example above as a guide, show the following addition of integers on the number lines provided:

   (a) \(4 + (-3)\)

   ![Number Line for 4 + (-3)]

   (b) \(4 + (-2)\)

   ![Number Line for 4 + (-2)]

   (c) \(-5 + 6\)

   ![Number Line for -5 + 6]

   (d) \(-4 + (-2)\)

   ![Number Line for -4 + (-2)]

   (e) \(8 - 8\) Note this means \(8 + (-8)\)

   ![Number Line for 8 - 8]

   (f) \(4 - 6\) Note this means \(4 + (-6)\).

   ![Number Line for 4 - 6]

2. Calculate the following:

   a. \(4 + 5\)
   e. \(-8 - 7\)
   b. \(4 - 5\)
   f. \(8 - 7\)
   c. \(-4 + 5\)
   g. \(-7 + 8\)
   d. \(-4 - 5\)
   i. \(-9 + 9\)
3. Laura owes €5 and she repays €2, how much does she owe then?
_____________________________________________________________________

4. Anne owes €10 and borrows a further €5, how much does she owe now?
_____________________________________________________________________

5. Patrick owes €8 and a week later his aunt gives him €25. If he pays back the amount he owes, how much does he now have?
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6. Kieran owes €5 but his aunt gives him €6 and his uncle gives him €7. Does he have enough to buy €10 phone credit if he pays back the money he owes? Explain your answer.
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_____________________________________________________________________

7. The current temperature is minus 2°C. What temperature should we expect if this is due to increase by 7°C in the afternoon and then decrease by 10°C at night.
_____________________________________________________________________

8. Grainne is on the 3rd floor of a building and walks down 4 sets of stairs, what floor is she now on, provided each set of stairs brings you down one floor?
_____________________________________________________________________

9. Write your own questions using the numbers below:
   (a) \(-3 + 10\)
   ___________________________________________________________________
   ___________________________________________________________________

   (b) \(-4 + (-8)\)
   ___________________________________________________________________
   ___________________________________________________________________

   (c) \(7 + (-10)\)
   ___________________________________________________________________
   ___________________________________________________________________

10. What is the largest negative integer?
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