**Construct Expressions, Formula and Equations**

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| Name : | Class : | Date : |

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| **1)** Write an algebraic expression for the sentence below (use the letter ***n*** to represent the missing number):         *Subtract 2 from a number* | [1] |
| **2)** If   cm is the length of a rectangle and   cm is the width, write down a formula for   if the perimeter of the rectangle is   cm. | [1] |
| **3)** Using the letter ***n***, write an equation to represent the following:         *I'm thinking of a number. I triple it then subtract 4 and get an answer of 14.* | [1] |
| **4)** a) Using the letter ***n*** to represent the missing number, write an equation for the following:        *I'm thinking of a number. I triple it then add 2 and get an answer of 20.*    b) Solve your equation to find the missing number | [1] |
| **5)** Find, in its simplest form, the **perimeter** of the shape given below in terms of  .        http://www.mathster.com/course/simgs/99822354876_1.png | [1] |
| **6)** Write down a fully simplified formula for the perimeter,  , of the isosceles triangle given below          http://www.mathster.com/course/simgs/99822354876_2.png | [1] |
| **7)** Write down a fully simplified formula for the perimeter,  , of the rectangle given below          http://www.mathster.com/course/simgs/99822354876_3.png | [1] |
| **8)** Write a formula using the letters and numbers given below       a)  Triple a number   and add 7       b)  A number   is equal to the sum of two numbers   and  . | [2] |
| **9)** Pears cost   pence each and I buy 10 of these pears. Write down a formula for   where   p is the total cost of the pears. | [1] |
| **10)** Jon has two trees in his garden. One is 35 metres taller than the other. If we let   be the height of the shorter tree, write an algebraic expression for the sum of the two trees' heights. | [1] |
| **11)** Write down a formula for the perimeter,  , of the rectangle given below          http://www.mathster.com/course/simgs/99822354876_4.png | [1] |

**Solutions for the assessment Construct Expressions, Formula and Equations**

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| **1)** | **2)** |
| **3)** | **4)** a)  , b)  =6 |
| **5)**   = (38a + 26)  km | **6)**   = (18y + 2z) |
| **7)**   = (18s + 8)  km |  |
| **8)**  a) | b)   = |
| **9)** | **10)** |
| **11)**   = (2c + 2d)  cm |  |