**Equations involving Brackets**

Solve the following equations in two different ways. Make sure you get the same answer from each method.

1

2

In question 1 and 2, the ‘dividing first’ method might seem more attractive because you expanding brackets is something new whereas you’re all masters of division. Write down the following equation in your book:

3

Which method seems more attractive now? Solve this equation using both methods.

Now use both methods to solve…

4

Don’t panic is just (Yes, this does involving adding fractions)

Choose the easiest way to solve each of the following equations. Your answers might be negative and or fractions.

5 

6 

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Form an equation involving brackets to solve the next question:

11 Three bags, each containing a block of mass A kg and five 1kg balls, balance with two bags of mass (4A – 1) kg. Find the value of A.

**Section B**

Solve each of the following equations each by two different methods – one ‘expanding first’ and one ‘dividing first’. Make sure both methods give the same answer.

Choose the easiest method to solve these

1. 
2. 
3. 
4. 
5. 
6. Explain why the equation 4(8E + 5) = 16(2E + 1) cannot have *any* solutions.

**Homework**

Solve each of the following equations each by two different methods – one ‘expanding first’ and one ‘dividing first’. Check your answer in the answer box below.

1 

2 

3 

4 

5\* Three bags, each containing a block of mass B kg and three 1kg balls, balance with six bags of mass (B – 1) kg.

Find the value of B.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

Solve each of these equations by first expanding the brackets:

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