**Solving Equations with an Unknown on Both Sides EXTENSION**

**Remember**: Start by eliminating the smallest unknown

8x + 2 = 4x + 10 14x + 4 = 5x + 31

5x + 6 = 2x + 45 12a + 4 = 5a + 60

5b – 2 = 2b + 7 8m – 14 = 3m + 46

-5z – 12 = 2z +15 6h – 10 = -4h – 6

7y – 20 = 2y – 10 -16f – 14 = 9f – 7

**Solving Equations with an Unknown on Both Sides CORE**

**Remember**: Start by eliminating the smallest unknown

8x + 2 = **4x** + 10 14x + 4 = **5x** + 31

-4x -4x -5x -5x

5x + 6 = **2x** + 45 12a + 4 = **5a** + 60

5b – 2 = **2b** + 7 8m – 14 = **3m** + 46

**-5z** – 12 = 2z +15 6h – 10 = **-4h** – 6

7y – 20 = **2y** – 10 **-16f** – 14 = 9f – 7

**Solving Equations with an Unknown on Both Sides SUPPORT**

**Remember**: Start by eliminating the smallest unknown

8x + 2 = **4x** + 10 14x + 4 = **5x** + 31

-4x -4x -5x -5x

4x + 2 = 10 9x + 4 = 31

 - 2 -2 -4 -4

4x = 8 9x = 27

÷4 ÷4 ÷9 ÷9

 x = 2 x = 3

5x + 6 = **2x** + 45 12a + 4 = **5a** + 60

-2x -2x -5a -5a

5b – 2 = **2b** + 7 8m – 14 = **3m** + 46

**-5z** – 12 = 2z +15 6h – 10 = **-4h** – 6

7y – 20 = **2y** – 10 **-16f** – 14 = 9f – 7