Fill In The Blanks…

**Simultaneous Equations** (different y coefficients)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Question** | **Multiply one or both equations** | **Add or subtract?** | **Carry out addition or subtraction** | **Work out** $x$ | **Substitute** $x $**into one equation** | **Work out** $y$ | **State both answers** |
| $$2x+y=9$$$$x+2y=6$$ | $$4x+2y=18$$$$x+2y=6$$ | Subtract | $$4x+2y=18$$$$- x+2y=6 $$$$3x =12$$ | $$x=4$$ | $$2x+y=9$$$$8+y=9$$ | $$y=1$$ | $$x=4$$$$y=1$$ |
| $$3x+y=17$$$$2x-3y=4$$ | $$9x+3y=51$$$$2x-3y=4$$ | Add | $$ 9x+3y=51$$$$+ 2x-3y=4 $$$$11x =55$$ |  |  |  |  |
| $$x-5y=9$$$$4x+y=15$$ | $$x-5y=9$$$$20x+5y=75$$ |  |  |  |  |  |  |
| $$4x+3y=1$$$$x-2y=-8$$ |  |  |  |  |  |  |  |
| $$2x-5y=13$$$$4x-2y=10$$ |  |  |  |  |  |  |  |
| $$x+6y=3$$$$2x+9y=4$$ |  |  |  |  |  |  |  |