

Simultaneous equations

Name _____

INSTRUCTIONS – Use substitution for the ones in italics AND then confirm your answer is correct using elimination. For the non italics, just use elimination to solve them.

<i>x + y = 1</i> <i>x - y = 5</i>	4x + 3y = 11 2x + y = 7	<i>5x + 2y = 33</i> <i>2x + y = 14</i>
<i>2x + 2y = 10</i> <i>x + 2y = 6</i>	3x + 4y = 29 x - 4y = -17	<i>3x + y = 18</i> <i>2x + y = 13</i>
<i>5x + 3y = 18</i> <i>5x + y = 16</i>	3x + 4y = 18 3x - 4y = -6	<i>5x + 3y = 14</i> <i>2x + 2y = 4</i>
<i>2x + 3y = 15</i> <i>5x - y = 46</i>	<i>6x + 2y = 10</i> <i>4x + y = 7</i>	4x + 2y = 2 2x + 2y = 0
<i>3x - 2y = 13</i> <i>x - y = 5</i>	4x + 3y = 13 6x - 2y = 13	<i>2x + 3y = 28</i> <i>3x - y = 9</i>
2p + 3q = 12 3p + 2y = 13	3x - 2y = 10 -3x + y = -11	<i>p + q = 0</i> <i>p - q = -2</i>

At the cinema Mr Ahmed buys 5 adults tickets and 3 children's tickets for £31. Mr Jones buys 3 adults tickets and 3 children's tickets for £24. How much are (i) adult tickets and (ii) children's tickets?

Paul took £400 from his savings. He had both £20 and £10 notes, a total of 23 altogether. Let x represent the number of £20 notes and y the number of £10 notes. Write down two equations and solve them.

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