

# Sort It Out

# Linear Simultaneous Equations

Sort these pairs of simultaneous equations into four categories, choosing for each pair the most efficient method for solving. Then solve each pair of simultaneous equations...

<b>1</b>	$x + 2y = 7$ $4x - 2y = 8$	<b>2</b>	$x + 5y = 13$ $x + 7y = 19$	<b>3</b>	$x - 3y = 2$ $4x - 3y = 17$
<b>4</b>	$5x + 2y = 11$ $6x + 2y = 13$	<b>5</b>	$2x + 7y = 29$ $x + 3y = 13$	<b>6</b>	$2x + y = 8$ $9x - 2y = 49$
<b>7</b>	$3x + 4y = 17$ $3x + 2y = 25$	<b>8</b>	$2x - 3y = 11$ $5x + 6y = 14$	<b>9</b>	$-2x + 3y = -7$ $x - 8y = 10$
<b>10</b>	$5x + 2y = -5$ $-5x - 3y = 10$	<b>11</b>	$3x + 2y = 12$ $-x + 11y = 31$	<b>12</b>	$5x + 3y = 6$ $9x + y = 24$
<b>13</b>	$2x - 5y = 2$ $3x - 7y = 4$	<b>14</b>	$4x + 3y = 11$ $7x - 2y = -17$	<b>15</b>	$11x - 4y = 8.5$ $6x - 3y = 3$

<b>A</b>	Match up the $x$ coefficients and add the equations	<b>B</b>	Match up the $x$ coefficients and subtract the equations
<b>10</b>	$x = 1, y = -5$	<b>2</b>	$x = -2, y = 3$
<b>9</b>	$x = 2, y = -1$	<b>5</b>	$x = 4, y = 3$
<b>11</b>	$x = 2, y = 3$	<b>7</b>	$x = 11, y = -4$
		<b>13</b>	$x = 6, y = 2$
<b>C</b>	Match up the $y$ coefficients and add the equations	<b>D</b>	Match up the $y$ coefficients and subtract the equations
<b>1</b>	$x = 3, y = 2$	<b>3</b>	$x = 5, y = 1$
<b>6</b>	$x = 5, y = -2$	<b>4</b>	$x = 2, y = 0.5$
<b>8</b>	$x = 4, y = -1$	<b>12</b>	$x = 3, y = -3$
<b>14</b>	$x = -1, y = 5$	<b>15</b>	$x = 1.5, y = 2$