

# Maths Workout - Algebra & Problem Solving

<b>Topic 6 - Solving Equations 1</b>				
<b>Target 1</b>	<b>Target 2</b>	<b>Target 3</b>	<b>Target 4</b>	<b>Target 5</b>
<i>Solve a simple equation by inspection: <math>x+4=12</math>, <math>2x=4</math>, <math>x/2=5</math></i>	<i>Complete the solution to a simple equation: <math>2x+3x=10</math>, <math>2x+1=7</math>, <math>x/2+3=5</math></i>	<i>Complete the solution to a simple equation: <math>3(x+4)=15</math>, <math>3(x+1)=x-8</math>, <math>3(x+1)=3(x-8)</math></i>	<i>Solve a simple equation of the form <math>2x+3x=10</math>, <math>2x+1=7</math></i>	<i>Solve a simple equation of the form <math>x/2+3=5</math>, <math>3(x+4)=15</math>, <math>3(x+1)=x-8</math>, <math>3(x+1)=-3(x-8)</math></i>
1. Demo: Solve an equation by inspection	1. Demo: Solve a simple equation of the form $2x+3=10$ , $6(x-3)=12$ using formal methods	1. Complete the solution to a simple equation of the form $2(x+1)=8$	1. Solve a simple equation of the form $2x+3x=10$ , $6x-3x=9$	1. Solve a simple equation of the form $x/2+3=10$ , $x/2-3=9$
2. Solve a simple equation of the form $x+2=5$ by inspection	2. Complete the solution to a simple equation of the form $2x+3x=10$ , $6x-3x=9$	2. Complete the solution to a simple equation of the form $2(x-1)=8$	2. Solve a simple equation of the form $3x=-2t+10$	2. Solve a simple equation of the form $2(x+1)=8$ , $2(x-1)=-5$
3. Solve a simple equation of the form $x+2=5$ by inspection, some negative answers	3. Complete the solution to a simple equation of the form $5x=2x+9$	3. Complete the solution to a simple equation of the form $4x+1=2x+9$	3. Solve a simple equation of the form $3x+1=10$	3. Solve a simple equation of the form $-2(x+1)=8$ , $-(x-1)=5$
4. Solve a simple equation of the form $x-2=5$ by inspection	4. Complete the solution to a simple equation of the form $2x+1=7$	4. Complete the solution to a simple equation of the form $4(x+1)=2(x+3)$	4. Mixed examples from Tasks 1 to 3	4. Solve a simple equation of the form $4x+1=-2x-9$
5. Solve a simple equation of the form $x-2=5$ by inspection, some negative answers	5. Complete the solution to a simple equation of the form $2x-1=7$	5. Complete the solution to a simple equation of the form $4(x-1)=2(x+3)$		5. Solve a simple equation of the form $2(x+1)=8x+1$ , $2(x-1)=-8x+1$
6. Solve a simple equation of the form $2x=6$ by inspection	6. Complete the solution to a simple equation of the form $x/2+1=7$	6. Complete the solution to a simple equation of the form $-4(x-1)=2(x-3)$		6. Solve a simple equation of the form $-2(x+1)=8x+1$ , $-(x-1)=-8x+1$
7. Solve a simple equation of the form $2x=6$ by inspection, including some negative answers	7. Complete the solution to a simple equation of the form $x/2-1=7$			7. Solve a simple equation of the form $4(x-1)=2(x+2)$
8. Solve a simple equation of the form $x/2=3$ by inspection				8. Solve a simple equation of the form $-4(x-1)=-2(x+2)$
9. Solve a simple equation of the form $x/2=3$ by inspection, including some negative answers				
10. Mixed examples from Tasks 1 to 8, all positive answers				
11. Mixed examples from Tasks 1 to 8, some negative answers				