

# Maths Workout - Algebra & Problem Solving

<b>Topic 2 - Writing Algebra 2</b>				
<b>Target 1</b>	<b>Target 2</b>	<b>Target 3</b>	<b>Target 4</b>	<b>Target 5</b>
<i>Express a 2-stage phrase with a single variable as an expression: multiply, add and subtract</i>	<i>Express a 2-stage phrase with a single variable as an expression: divide, add and subtract</i>	<i>Express a 2-stage phrase with 2 variables as an expression</i>	<i>Express a 2-stage phrase with up to 2 variables as an expression (using brackets)</i>	<i>Express a 2-stage phrase with up to 2 variables as an expression (using algebraic brackets and fractions)</i>
1. Convert a phrase to an expression, e.g. What number is 5 more than 2 times b?	1. Convert a phrase to an expression, e.g. Divide x by 2 then add 3	1. Convert a phrase to an expression, e.g. What number is 5 more than 2 times b?	1. Demo: Use of brackets	1. Demo: Use of algebraic fractions with and without brackets
2. Calculate missing lengths of a shape with part lengths as algebraic terms	2. Calculate missing lengths of a shape with part lengths as algebraic terms	2. Calculate missing lengths of a shape with part lengths as algebraic terms	2. Convert a phrase to an expression, e.g. add 2 to b, then multiply the result by 2	2. Convert a phrase to an expression, e.g. add 2 to b, then divide/multiply the result by 2
3. Calculate missing lengths of a shape with part lengths as algebraic terms	3. Convert a phrase to an expression e.g. What number is 2 less than a half of b?	3. Calculate missing lengths of a shape with part lengths as algebraic terms	3. Calculate missing lengths of a shape with part lengths as algebraic terms	3. Convert a phrase to an expression, e.g. What number is half the sum of a and b?
4. Convert a phrase to an expression, e.g. What number is 5 more than 3 times d?	4. Convert a phrase to an expression, e.g. I start with d, divide by 2 then add 6. What am I left with?	4. Convert a phrase to an expression, e.g. What number is 5 more than 3 times d?	4. Convert a phrase to an expression, e.g. What number is twice the sum of a and b?	4. Convert a phrase to an expression, e.g. I start with d, add 2 then divide/multiply by 6. What am I left with?
5. Convert a phrase to an expression, e.g. I start with d, multiply by 2 then add 6. What am I left with?	4. Complete a number machine	5. Convert a phrase to an expression, e.g. I start with d, multiply by 2 then add 6. What am I left with?	5. Convert a phrase to an expression, e.g. I start with d, add 2 then multiply by 6. What am I left with?	5. Complete a number machine
6. Complete a number machine	6. Complete a number machine	6. Complete a number machine	6. Complete a number machine	6. Complete a number machine
7. Complete a number machine	7. Speed Response: Assemble a number machine	7. Complete a number machine	7. Complete a number machine	7. Speed Response: Assemble a number machine
8. Complete a number machine	8. Speed Response : Fun: Assemble a number machine with inverted elements	8. Speed Response: Assemble a number machine	8. Complete a number machine	8. Speed Response: Fun: Assemble a number machine with inverted elements
9. Speed Response: Assemble a number machine		9. Speed Response: Fun: Assemble a number machine with inverted elements	9. Speed Response: Assemble a number machine	
10. Speed Response: Fun: Assemble a number machine with inverted elements			10. Speed Response: Fun: Assemble a number machine with inverted elements	