

# Decode the Joke

# Simplifying Expressions

Simplify the expression for each of the letters of the alphabet.

<b>A</b>	$a + a$	$2a$
<b>B</b>	$a + a + b$	$2a + b$
<b>C</b>	$b + b + b$	$3b$
<b>D</b>	$a + b + b$	$a + 2b$
<b>E</b>	$5b - b$	$4b$
<b>F</b>	$2a + b + b$	$2a + 2b$
<b>G</b>	$6a - a - a$	$4a$
<b>H</b>	$a \times b$	$ab$
<b>I</b>	$2a + 4a$	$6a$
<b>J</b>	$7b - 2b + b$	$6b$
<b>K</b>	$9 \times a$	$9a$
<b>L</b>	$3 \times 5a$	$15a$
<b>M</b>	$6a - a + 3b + b$	$5a + 4b$

<b>N</b>	$a \times a$	$a^2$
<b>O</b>	$3 \times a \times a$	$3a^2$
<b>P</b>	$20b \div 4$	$5b$
<b>Q</b>	$2a - a - a$	$0$
<b>R</b>	$5b \times b$	$5b^2$
<b>S</b>	$10b \times 2b$	$20b^2$
<b>T</b>	$a^2 + 7a^2$	$8a^2$
<b>U</b>	$9b^2 - 2b^2$	$7b^2$
<b>V</b>	$a + a + a^2$	$2a + a^2$
<b>W</b>	$7 \times 3b^2$	$21b^2$
<b>X</b>	$5b^2 - a^2 + 2b^2$	$7b^2 - a^2$
<b>Y</b>	$5a \times 2b$	$10ab$
<b>Z</b>	$a \times 3a \times 4b$	$12a^2b$

Now decode the joke...

$21b^2$	$ab$	$2a$	$8a^2$		$a + 2b$	$6a$	$a + 2b$		$8a^2$	$ab$	$4b$		$8a^2$	$5b^2$
<b>W</b>	<b>H</b>	<b>A</b>	<b>T</b>		<b>D</b>	<b>I</b>	<b>D</b>		<b>T</b>	<b>H</b>	<b>E</b>		<b>T</b>	<b>R</b>

$6a$	$2a$	$a^2$	$4a$	$15a$	$4b$		$20b^2$	$2a$	$10ab$		$8a^2$	$3a^2$		$8a^2$
<b>I</b>	<b>A</b>	<b>N</b>	<b>G</b>	<b>L</b>	<b>E</b>		<b>S</b>	<b>A</b>	<b>Y</b>		<b>T</b>	<b>O</b>		<b>T</b>

$ab$	$4b$		$3b$	$6a$	$5b^2$	$3b$	$15a$	$4b$	?		$10ab$	$3a^2$	$7b^2$	
<b>H</b>	<b>E</b>		<b>C</b>	<b>I</b>	<b>R</b>	<b>C</b>	<b>L</b>	<b>E</b>	?		<b>Y</b>	<b>O</b>	<b>U</b>	'

$5b^2$	$4b$		$5b$	$3a^2$	$6a$	$a^2$	$8a^2$	$15a$	$4b$	$20b^2$	$20b^2$	!		
<b>R</b>	<b>E</b>		<b>P</b>	<b>O</b>	<b>I</b>	<b>N</b>	<b>T</b>	<b>L</b>	<b>E</b>	<b>S</b>	<b>S</b>	!		