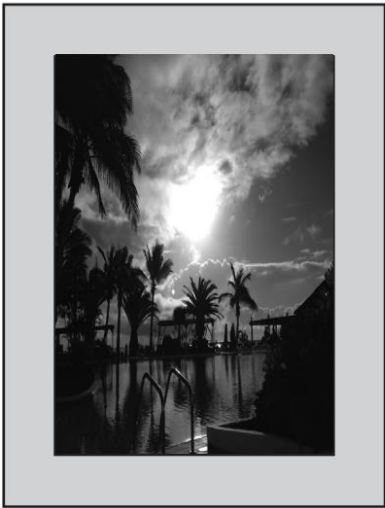
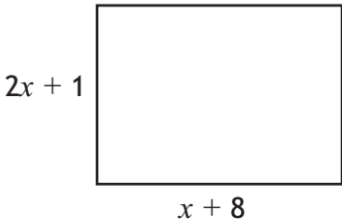
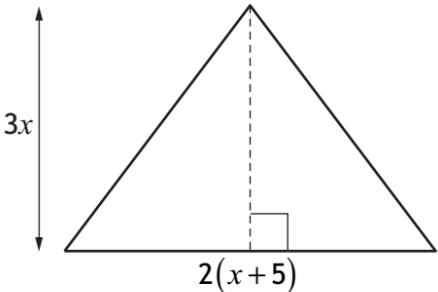


BRACKETS

YEAR	PAPER	QUESTION
2014	1	<p>Multiply out the brackets and collect like terms:</p> $(2x - 5)(3x + 1).$ <p style="text-align: right;">2</p>
2015	1	<p>Multiply out the brackets and collect like terms</p> $(x - 4)(x^2 + x - 2).$ <p style="text-align: right;">3</p>
2015	2	<p>A rectangular picture measuring 9 centimetres by 13 centimetres is placed on a rectangular piece of card.</p> <p>The area of the card is 270 square centimetres.</p> <p>There is a border x centimetres wide on all sides of the picture.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p>(a) (i) Write down an expression for the length of the card in terms of x. 1</p> <p>(ii) Hence show that $4x^2 + 44x - 153 = 0$. 2</p>
2016	1	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p>(a) Find an expression for the area of the rectangle. 1</p> <p>(b) Given that the area of the rectangle is equal to the area of the triangle, show that $x^2 - 2x - 8 = 0$. 3</p>

2017	1	Expand and simplify $(2x + 3)(x^2 - 4x + 1)$.	3
2018	1	Expand and simplify $(3x + 1)(x - 1) + 2(x^2 - 5)$.	3
2019	1	Expand and simplify $(x + 5)(2x^2 - 7x - 3)$.	3
2022	2	Expand and simplify $(3x - 2)(2x^2 + 5x - 1)$.	3