## <u>Trigonometry – 2022 O Level Additional Math</u>

1. June/2022/Paper 11/No.6(b)

**(b) (i)** Show that 
$$\frac{1 + \tan \theta}{1 - \cos \theta} + \frac{1 - \tan \theta}{1 + \cos \theta} = \frac{2(1 + \sin \theta)}{\sin^2 \theta}.$$
 [4]



Given that  $x = \sec^2 \theta$  and  $y+2 = \cot^2 \theta$ , find y in terms of x.

