if $x = sec\theta + tan\theta$ than $x + \frac{1}{x} =?$
$sec\theta = \frac{1}{cos\theta}, tan\theta = \frac{sin\theta}{cos\theta}$
So $x = \frac{1+sin\theta}{cos\theta}$
then $x + \frac{1}{x} = \frac{cos\theta}{1+sin\theta} + \frac{1+sin\theta}{cos\theta} = \frac{(1+sin\theta)^2+cos^2\theta}{cos\theta(1+sin\theta)} == \frac{1+2*sin\theta+sin\theta^2+cos^2\theta}{cos\theta(1+sin\theta)} = \frac{2+2*sin\theta}{cos\theta(1+sin\theta)} = \frac{2(1+sin\theta)}{cos\theta(1+sin\theta)} = \frac{2}{cos\theta} = 2sec\theta.$