

Use the exact value of trigonometry to evaluate the following

A.  $2 \sin 60^\circ + \tan 45^\circ + \cos^2 60^\circ$  a)  $\frac{5 + 4\sqrt{3}}{4}$  b)  $4\sqrt{3}$  c)  $5 + 4\sqrt{3}$

B.  $\frac{\cos x + \sin x}{2 \sin x + \cos x}$ , given that  $\tan x = \frac{1}{2}$  when  $x$  is acute  
a)  $\frac{3}{\sqrt{5}}$  b)  $\frac{3}{4}$  c)  $\frac{4}{5}$

C.  $2 \sin 60^\circ - \cos 30^\circ$  a)  $\frac{2}{\sqrt{3}}$  b)  $\frac{1}{2}$  c)  $\frac{\sqrt{3}}{2}$

D.  $\frac{\sin 30^\circ - \cos 30^\circ}{\sin 60^\circ}$  a)  $\frac{\sqrt{3}}{2}$  b)  $\frac{1}{2}$  c)  $-\frac{1}{2}$

E.  $\sin 30^\circ + \tan 45^\circ - \cos 60^\circ$  a) 2 b) 1 c)  $\sqrt{3}$

F.  $\frac{\cos 60^\circ - \sin 60^\circ}{\sin 60^\circ + \cos 60^\circ}$  a) 0 b) 1 c) 2

G.  $2 \tan 45^\circ - \tan 60^\circ$  a)  $\sqrt{3}$  b)  $2 - \sqrt{3}$  c) 2