

You inflate the tires of your car so the pressure is 30 psi, when the air inside the tires is at 20 degrees C. After driving on the highway for a while, the air inside the tires heats up to 38 C. Which number is closest to the new air pressure?

1) 16 psi

2) 32 psi

3) 57 psi

Careful, you need to use the temperature in K

$$P = P_0 (38+273)/(20+273)$$