

# Gasfitter – Class A Level 1

## FORMULAS

$Q = CFM \times 1.2 \times \Delta T$	$Q = 1658.5 \times K \times A \times \sqrt{\frac{\Delta P}{Sg}}$	$Q = \frac{3600}{t} \times V \times \frac{(Pl + Pa)}{Ps} \times \frac{(Ta + Ts)}{Ta + T}$
$\frac{P_1 \times V_1}{T_1} = \frac{P_2 \times V_2}{T_2}$ <p>OR</p> $P_1 \times T_2 \times V_1 = P_2 \times T_1 \times V_2$		
$V = 4005 \times \sqrt{\Delta P}$	$D = 7.6 \times \left(\frac{T_s - T_a}{T_s \times T_a}\right) \times H$	
$Velocity = \frac{Volume}{Area}$	$Area = D^2 \times 0.7854$	
$T_{Nm} = \frac{P_{kW} \times 9.549}{n}$	<p>For <math>\Delta</math> circuits</p> $E_{line} = E_{phase}$ $I_{line} = \sqrt{3} I_{phase}$	<p>For Y circuits</p> $E_{line} = \sqrt{3} E_{phase}$ $I_{line} = I_{phase}$
$Shunt\ Resistance = \frac{Source\ Volts}{\left(\frac{Source\ mA - Loop\ mA}{1000}\right)}$		

**NOTE** Do **not** bring this document to your exam.  
 These formulas will be included in the exam reference materials.