

## Interest Inclusive Price DFC calculation

X = Price excluding Interest  
P\* = Rate of Interest  
I = Interest Amount  
Y = Price including Interest

- \* Where (for example) the Rate is 8% that rate is per annum and is shown as 0.08
- \* Where (for example) the Rate is 8% for 120 days, the rate of 8% is per annum however because the terms are 120 days the calculation is  $8/100 \times 120/365 = 0.0263$
- \* Where (for example) the Rate is 8% for 90 days, the rate of 8% is per annum however because the terms are 90 days the calculation is  $8/100 \times 90/365 = 0.019726$

Where:

$$\begin{aligned}X + I &= Y \\I &= X \times P \\X + (X \times P) &= Y \\X(1 + P) &= Y \\X &= Y / 1 + P\end{aligned}$$

So that, for example, where the interest inclusive price is \$22,500.00 and the interest rate is 8% for 120 days:

$$\begin{aligned}X + I &= \$22,500.00 \\I &= X \times 0.0263 \\(X \times 0.0263) &= \$22,500.00 \\(1 + 0.0263) &= \$22,500.00 \\X &= \$22,500.00 / 1 + 0.0263 \\X &= \$22,500.00 / 1.0263 \\X &= \$21,923.41\end{aligned}$$

Therefore: \$22,500.00 - \$21,923.41  
Interest = \$576.59