

## Quiz 1 Solutions

1. You would need to calculate the ask price.

$$P=100(1-(0.0588 \times 27)/360) = 99.559$$

Note: You can also calculate the price using the AskYld but would need to use the BEY formula.

2. The interest rate over the next 27 days is

$$99.559(1+r_{27\text{days}})=100$$

$$r_{27\text{days}}=(100/99.559 - 1) = 0.443\%$$

The effective annual interest rate is

$$(1+\text{EAR}) = (1+0.00443)^{(365/27)} = 1.06157 \rightarrow \text{EAR} = 6.16\%$$

3. The Fisher relation states that

$$\text{Real} = \text{Nominal} - \text{expected inflation}$$

We assume that expected inflation is equal to the actual inflation rate.

$$\text{Annual real rate of return} = 6.16 - 3 = 3.16\%$$

Since you will be receiving a fixed face value amount at maturity, the higher the inflation rate, the lower the real rate of return. Therefore, you would prefer a lower inflation rate.