Quiz #8a

a) $\text{NOMINAL GDP}_{2016} = \sum P_{16} Q_{16} = (1160 \times 2) + (965 \times 9) + (25 \times 13) + (20 \times 7\frac{1}{2})$

$= \boxed{\$12,830}$

b) $\text{REAL GDP}_{2016} = \sum P_{15} Q_{16} = (1100 \times 2) + (950 \times 9) + (15 \times 25) + (65 \times 20)$

$= \boxed{\$12,425}$

c) $\text{GDP deflator}_{2016} = \dfrac{\text{NOMINAL GDP}}{\text{REAL GDP}} = \dfrac{12830}{12425} = \boxed{1.0326}$

d) $CPI_{2016} = \dfrac{\sum P_{16} Q_{15}}{\sum P_{15} Q_{15}} = \dfrac{(1160 \times 3) + (965 \times 12) + (13 \times 36) + (75 \times 3)}{(1100 \times 3) + (950 \times 12) + (15 \times 36) + (65 \times 30)}$

$= \dfrac{\$17,778}{\$17,190} \times 100 = \boxed{103.42}$

e) $\text{INFLATION}_{2016} = \dfrac{103.42 - 100}{100} \times 100\% = \boxed{3.42\%}$

f) $\text{inflation}_{\text{AUG 2017}} = \dfrac{245.519 - 244.786}{244.786} \times 12 \times 100\% =$

$\boxed{3.59\%}$