

Write in the box the number of the question you are answering on this page as it is designated in the exam.

3

3A

(a) ~~required reserves~~

$$(a) \quad rr = \frac{\text{required reserves}}{\text{deposits}}$$

$$= \frac{\$2000}{\$10000}$$

$$= \text{20\%} \quad \boxed{0.2}$$

(b) (i) excess reserves increase by \$5000.

(ii) ~~deposits~~ Demand deposits remain unchanged immediately after the purchase.
~~excess reserves~~

$$(c) \quad \$5000 \times \frac{1}{rr}$$

$$\$5000 \times \frac{1}{0.2}$$

$$\$5000 \times 5$$

$$\boxed{\$25,000}$$

(d) The price of bonds increases. When bonds are purchased by the Federal Reserve, the money supply increases, decreasing nominal interest rates. If interest rates decrease, the price of the bond must increase so that the return from the bond stays constant.

(e) M1 does not change ~~immediately~~ immediately because ~~both~~ the money was part of M1 as both cash and ~~are~~ a checking deposit. Since both forms are part of M1, ~~the~~ the M1 measure of the money supply experienced no ~~an~~ immediate change.