







**D = 700**

Currency = 8000b

$r = 10\%$

$R = 0.1 * 700$

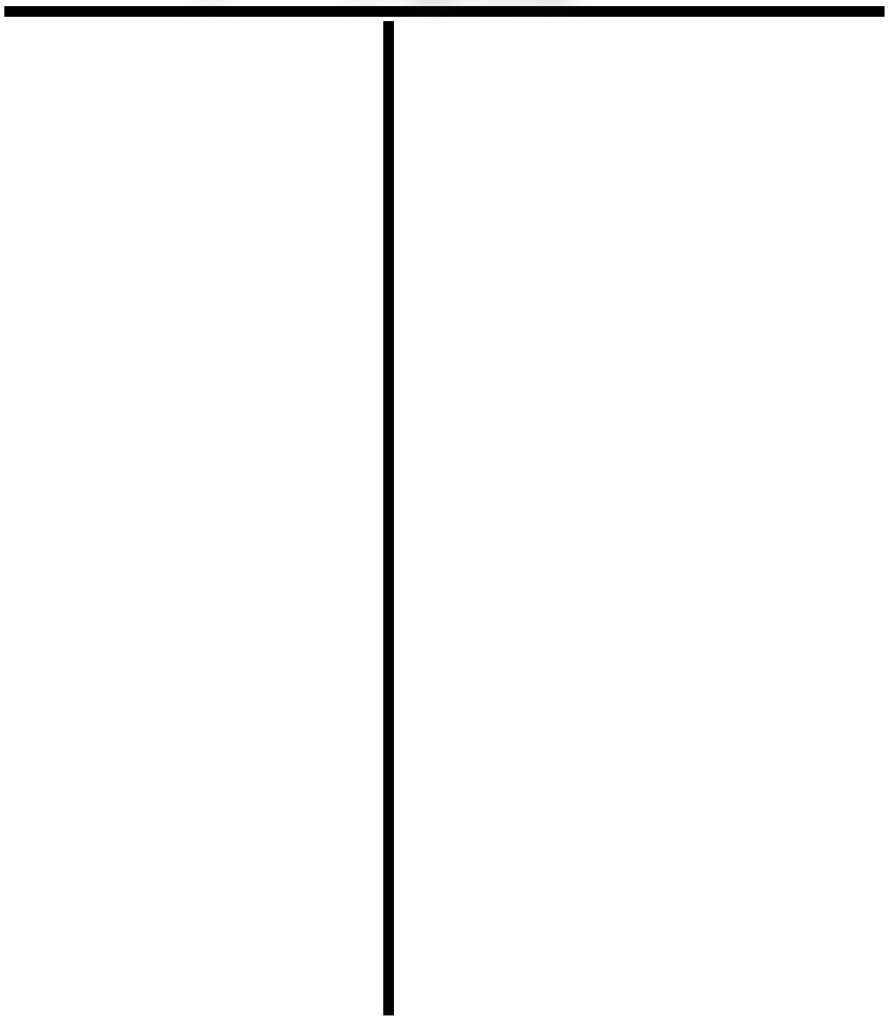
**L = 630**



Suppose that 1b of the 800b held by the public as  
currency outside the banking system is now  
deposited into the banking system

$$\Delta D = \Delta R \times (1/r)$$

$r=10\%$



$$\Delta R \equiv 1$$

$$\Delta L = \Delta D - \Delta R$$

$$M^s = 800 + 700$$

$$M^s = 1,500$$

NewR = 70 + 1

NewD = 700 + 10



NewL = 630 + 9

New Ms = 1,500 + 9

$$\Delta M^s = \Delta \text{Currency} + \Delta D$$

+9

$R = r \times D$

**L = D - R**

$$M^s = \text{Currency} + \text{Deposits}$$





+10

Example: The following values are  
given

Calculate: Required reserves, Loans  
and the Money Supply

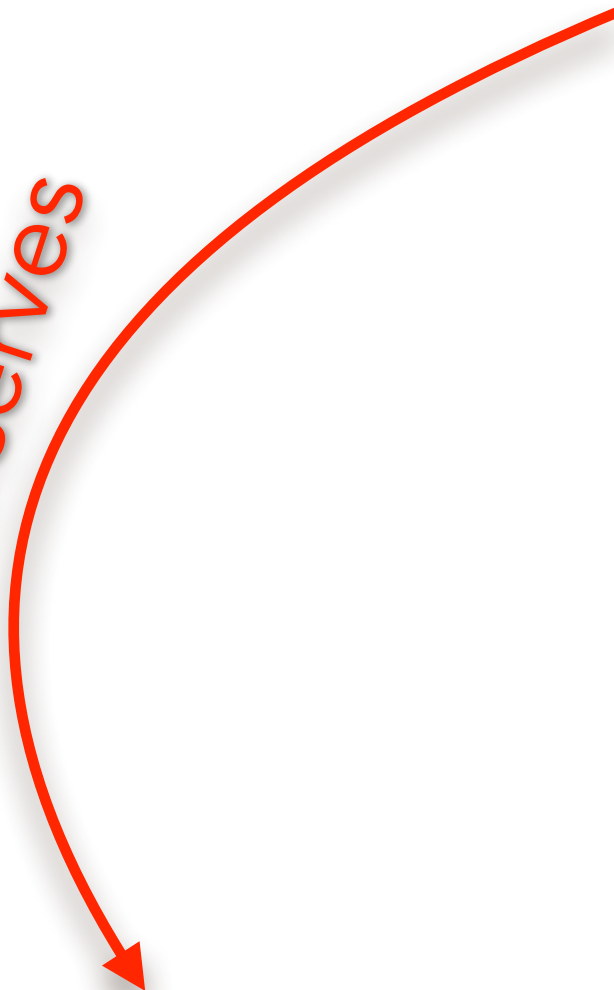
**R=70**

**L = 700 - 70**

Calculate: New Reserves, New Loans, New  
Deposits and the New Money Supply



New Reserves



$$\Delta D = 1 \times (1/0.1) = 10$$



$$\Delta L = 10 - 1 = 9$$

New R = 71

New L = 639

NewD = 710

New Ms = 1,509

Before  
 $r=10\%$

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$R=70$	$D = 700$
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$L = 630$
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$$M^s = 800 + 700$$

$$M^s = 1,500$$

After  
 $r=10\%$

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$R=71$	$D=710$
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$L=639$
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$$M^s = 799 + 710$$
$$M^s = 1,509$$

The amount of  
currency held by  
the public  
decrease by 1b





Banks will now  
multiply this  
1b as new  
loans

Example: The following values are given

Calculate: Required reserves, Loans and the Money Supply

Before

$r=10\%$

R=70	D = 700
L= 630	

$$M^s = 800 + 700$$

$$M^s = 1,500$$

Suppose that 1b of the 800b held by the public as currency **outside the banking system** is now deposited into the banking system

Calculate: New Reserves, New Loans, New Deposits and the New Money Supply

After

$r=10\%$

R=71	D = 710
L= 639	

$$M^s = 799 + 710$$

$$M^s = 1,509$$

Example: The following values are  
given

