

UC San Diego

RADY SCHOOL OF MANAGEMENT

PRINCIPLES OF ACCOUNTING
WINTER 2024
(WEEK 2)

Dr. Andrey Pérez Silva

❑ TA Office Hours – C00

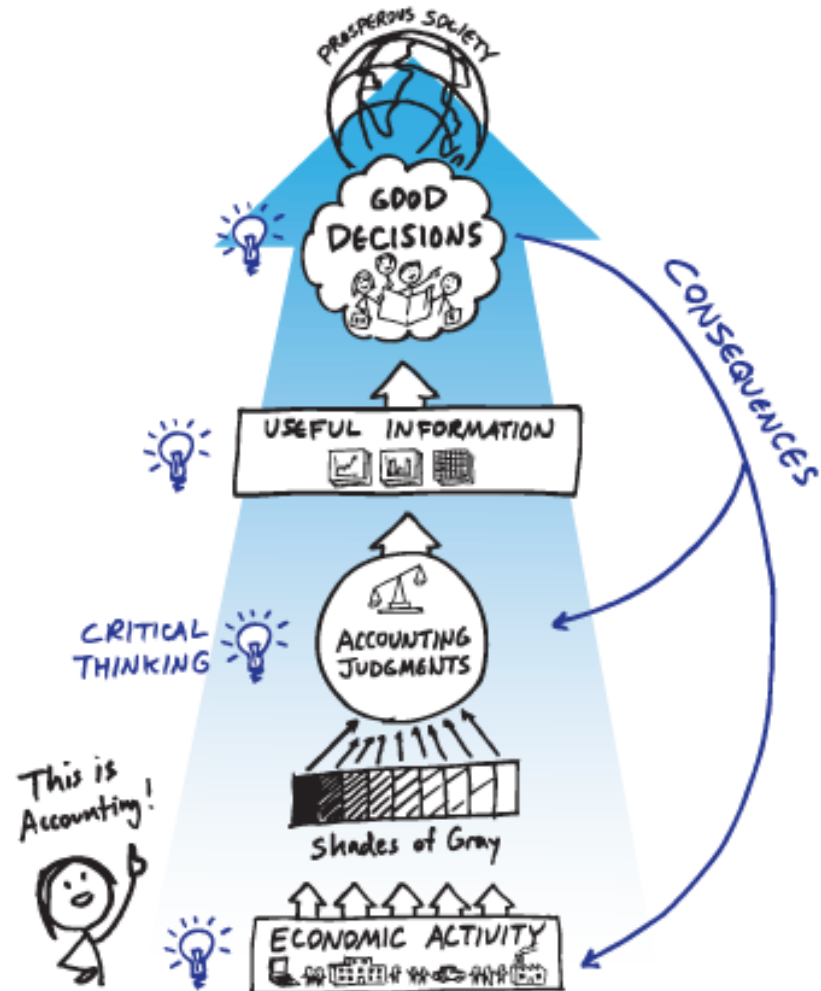
- This week
 - Tuesday 3-4pm, Office 2E124
 - Friday 1-2pm, Office 2E124
- Going forward
 - Tuesdays 3-4pm, Office 2E124
 - By appointment: Email Stephanie

Class Outline

☐ Achieving the Objective

	Topics
Week 1	Financial Accounting Framework ✓
Week 2	Double-entry mechanics
Week 3	The Accounting Cycle
Week 4	Accounts Receivable
Week 5	Inventories
Week 6	MIDTERM EXAM
Week 7	Long-Term Assets
Week 8	Accounting Fraud
Week 9	Liabilities
Week 10	Accounting Transactions
Finals Week	FINAL EXAM

- Economic activity is complex.....accounting requires judgment and critical thinking



UC San Diego

RADY SCHOOL OF MANAGEMENT

FINANCIAL ACCOUNTING FRAMEWORK RECAP

Objective: Week 1 Refresher

❑ Financial Statements – company's periodic reports – (Communication)

- Balance Sheet
 - At start of period ✓
 - At end of year ✓
- Income Statement
 - For the year ✓
- Statement of Stockholders' Equity
 - For the year ✓
- Statement of Cash Flows
 - For the year ✓

□ Financial Statements – company's periodic reports – (Communication)

➤ Balance Sheet

- At start of period ✓
- At end of year ✓

➤ Income Statement

- For the year ✓

➤ Statement of Stockholders' Equity

- For the year ✓

➤ Statement of Cash Flows

- For the year ✓

Details about the
change between
two balance sheet
dates

□ Financial Statements – company's periodic reports – (Communication)

➤ Balance Sheet

- At start of period ✓
- At end of year ✓

➤ Income Statement

- Details about resource flows
Generating value

➤ Statement of Stockholders' Equity

- Changes in the equity

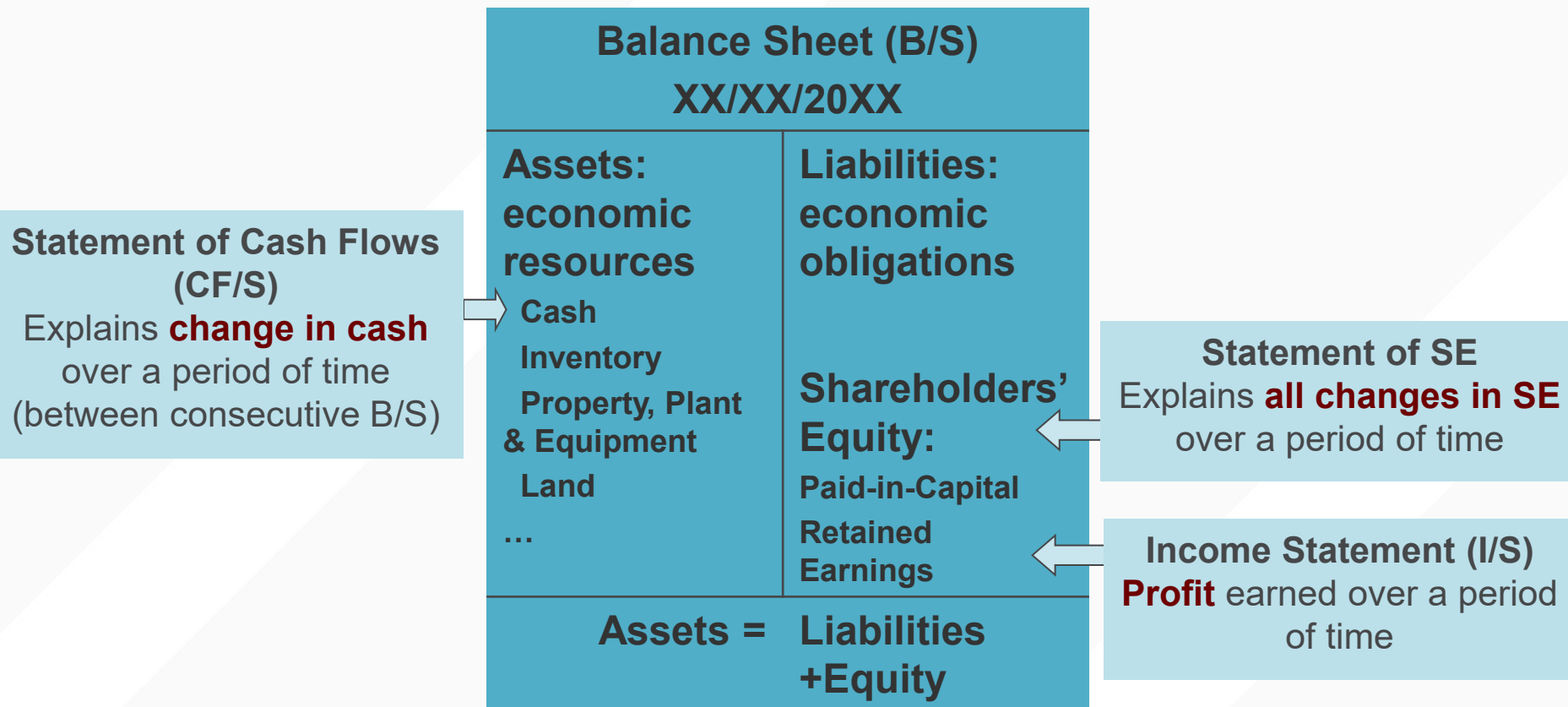
➤ Statement of Cash Flows

- Changes in the cash

Details about the
change between
two balance sheet
dates

Linking the F/S

- Financial Statements – company's periodic reports – (Communication)



Financial statements do not exist in isolation: link between B/S, I/S, CF/S and Statement of Shareholders' Equity!

Financial Statements

How they link:

[1]

(\$ millions)

Balance Sheet May 31, 2017	
Assets	
Cash	\$ 3,808
Noncash assets	19,451
Total assets	<u>\$23,259</u>
Liabilities and equity	
Liabilities	\$10,852
Stockholders' equity	12,407
Total liabilities and equity	<u>\$23,259</u>

[5]

Statement of Cash Flows For Year Ended May 31, 2018	
Operating cash flows	\$ 4,955
Investing cash flows	276
Financing cash flows	(4,835)
Exchange rate changes	45
Increase (decrease) in cash	441
Cash, May 31, 2017	3,808
Cash, May 31, 2018	<u>\$ 4,249</u>

[6]

[3]

Income Statement For Year Ended May 31, 2018	
Revenues	\$36,397
Expenses	34,464
Net income	<u>\$ 1,933</u>

[2]

Statement of Stockholders' Equity For Year Ended May 31, 2018	
Stockholders' equity, May 31, 2017	\$12,407
Net income	1,933
Dividends	(1,265)
Stock issuances and other	(3,263)
Stockholders' equity May 31, 2018	<u>\$9,812</u>

[4]

Balance Sheet May 31, 2018	
Assets	
Cash	\$ 4,249
Noncash assets	18,287
Total assets	<u>\$22,536</u>
Liabilities and equity	
Liabilities	\$12,724
Stockholders' equity	9,812
Total liabilities and equity	<u>\$22,536</u>

Point in time
(Beginning of year)

Period of time
(Fiscal year)

Point in time
(End of year)


2018
FORM 10-K

Financial Statements

☐ Net Income = ↑ SE

☐ Net Loss = ↓ SE


2018
FORM 10-K

[3]

Income Statement For Year Ended May 31, 2018

Revenues	\$36,397
Expenses	34,464
Net income	<u>\$ 1,933</u>

Balance Sheet May 31, 2018

Assets

Cash	\$ 4,249
Noncash assets	18,287
Total assets	<u>\$22,536</u>

Liabilities and equity

Liabilities	\$12,724
Stockholders' equity	9,812
Total liabilities and equity	<u>\$22,536</u>

Statement of Stockholders' Equity For Year Ended May 31, 2018

Stockholders' equity, May 31, 2017	\$12,407
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Dividends	(1,265)
Stock issuances and other	<u>(3,263)</u>
Stockholders' equity May 31, 2018	<u>\$9,812</u>

[4]

Point in time
(Beginning of year)

Period of time
(Fiscal year)

Point in time
(End of year)

Financial Statements

☐ Revenues = ↑ SE

☐ Expenses = ↓ SE


2018
FORM 10-K

[3]

Income Statement For Year Ended May 31, 2018

Revenues	\$36,397
Expenses	34,464
Net income	<u>\$ 1,933</u>

Statement of Stockholders' Equity For Year Ended May 31, 2018

Stockholders' equity, May 31, 2017	\$12,407
Net income	1,933
Dividends	(1,265)
Stock issuances and other	<u>(3,263)</u>
Stockholders' equity May 31, 2018	<u>\$9,812</u>

Point in time
(Beginning of year)

Period of time
(Fiscal year)

Point in time
(End of year)

Financial Statements

☐ Revenues = ↑ SE

☐ Expenses = ↓ SE

Revenues



Net Income



Retained Earnings



Stockholders' Equity



Expenses



Net Income



Retained Earnings



Stockholders' Equity



DOUBLE ENTRY RECORDKEEPING

Objective: Understand the dual-entry recording framework and learn to use it to record a series of transactions

Double-entry Accounting

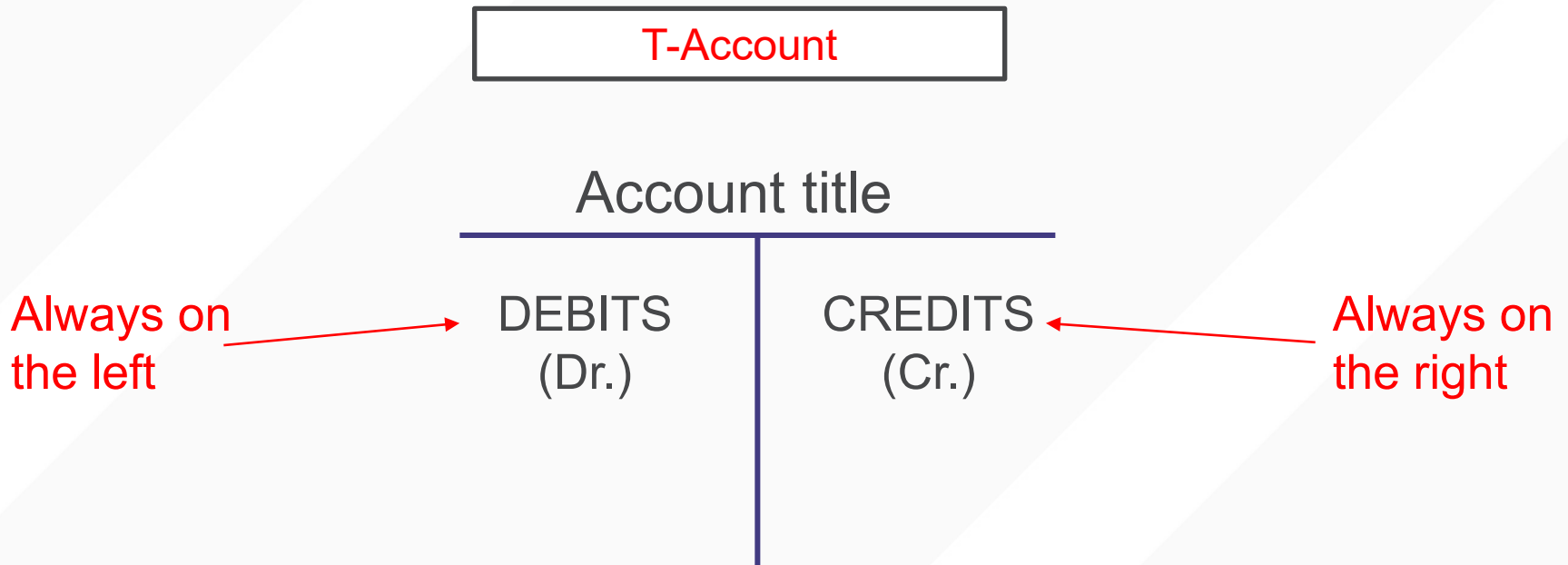
- ❑ Every economic event has two sides, a give and a take
- ❑ Record both sides of economic events as a *transaction*

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$$

- ❑ Every transaction will affect at least one of these classes: **A, L, or SE**
- ❑ Accounting equation must always be balanced → The two sides of a transaction must balance

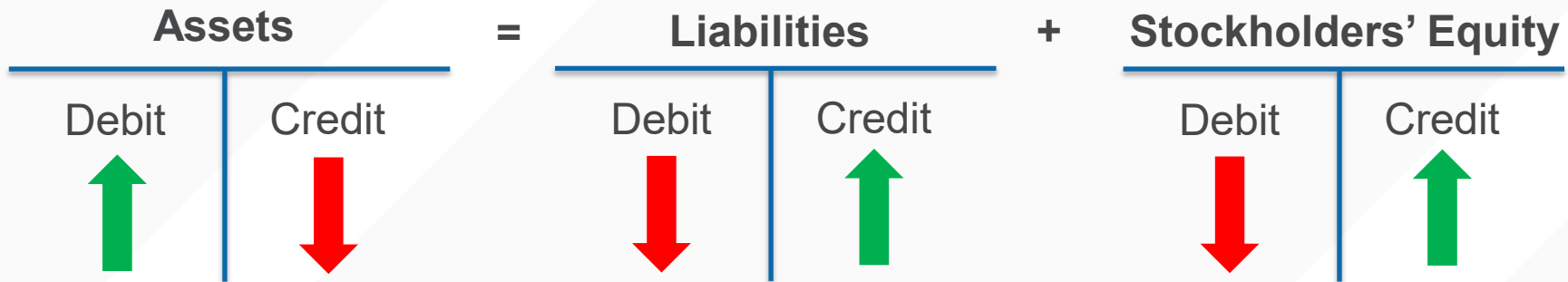
Double-entry Accounting

- ❑ Each transaction (economic event) will have a **dual effect**
- ❑ How do we increase and decrease the account balances?
 - Debits and credits
 - Debit → left
 - Credit → right



Double-entry Accounting

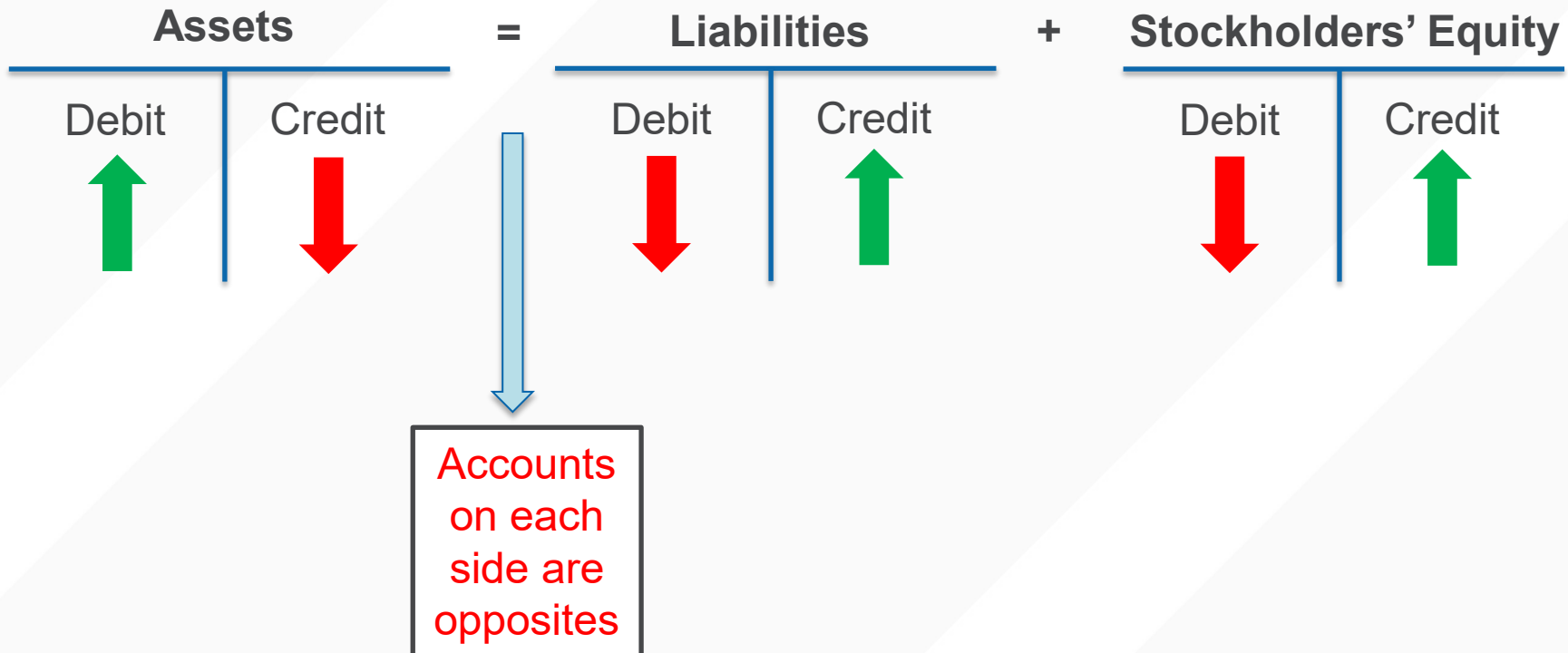
- One side of the T-account is used to record increases to the account, and the other side is used to record decreases to the account.



- A debit increases *assets* and decreases *liabilities* and *SE*
- A credit decreases *assets* and increases *liabilities* and *SE*

Double-entry Accounting

- One side of the T-account is used to record increases to the account, and the other side is used to record decreases to the account.



□ Rules of Debits and Credits

- No negative numbers are allowed.
 - We use debit (Dr) and credit (Cr)
- Every transaction must have at *least* one debit and at least one credit
- Debits must equal credits for all transactions.
 - If you increase one you must increase another

Debits = Credits

Double-entry Accounting

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
2.	Purchase equipment for \$60,000 cash.			
3.	Purchase inventory for \$15,000 on account.			
4.	Pay supplier \$8,000 cash of the \$15,000 owed.			
5.	Pay for one year insurance policy, \$600 in cash.			

Double-entry Accounting

- Local bank loans you \$100,000.

CASH	
100,000	

NOTES PAYABLE	
	100,000

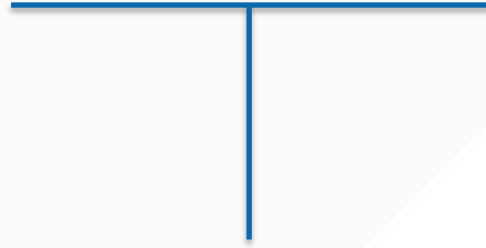
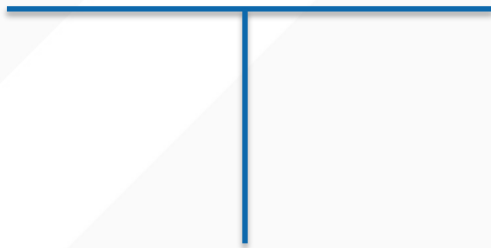
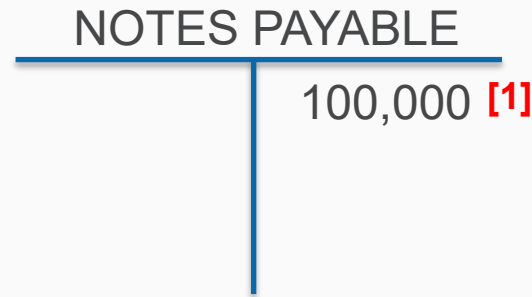
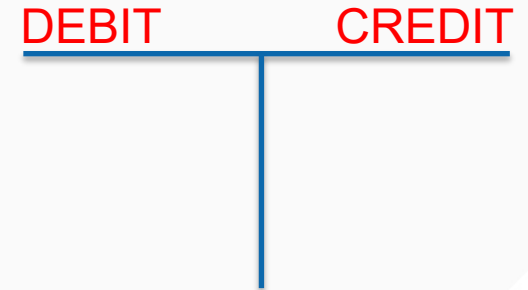
DEBIT	CREDIT

Double-entry Accounting

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
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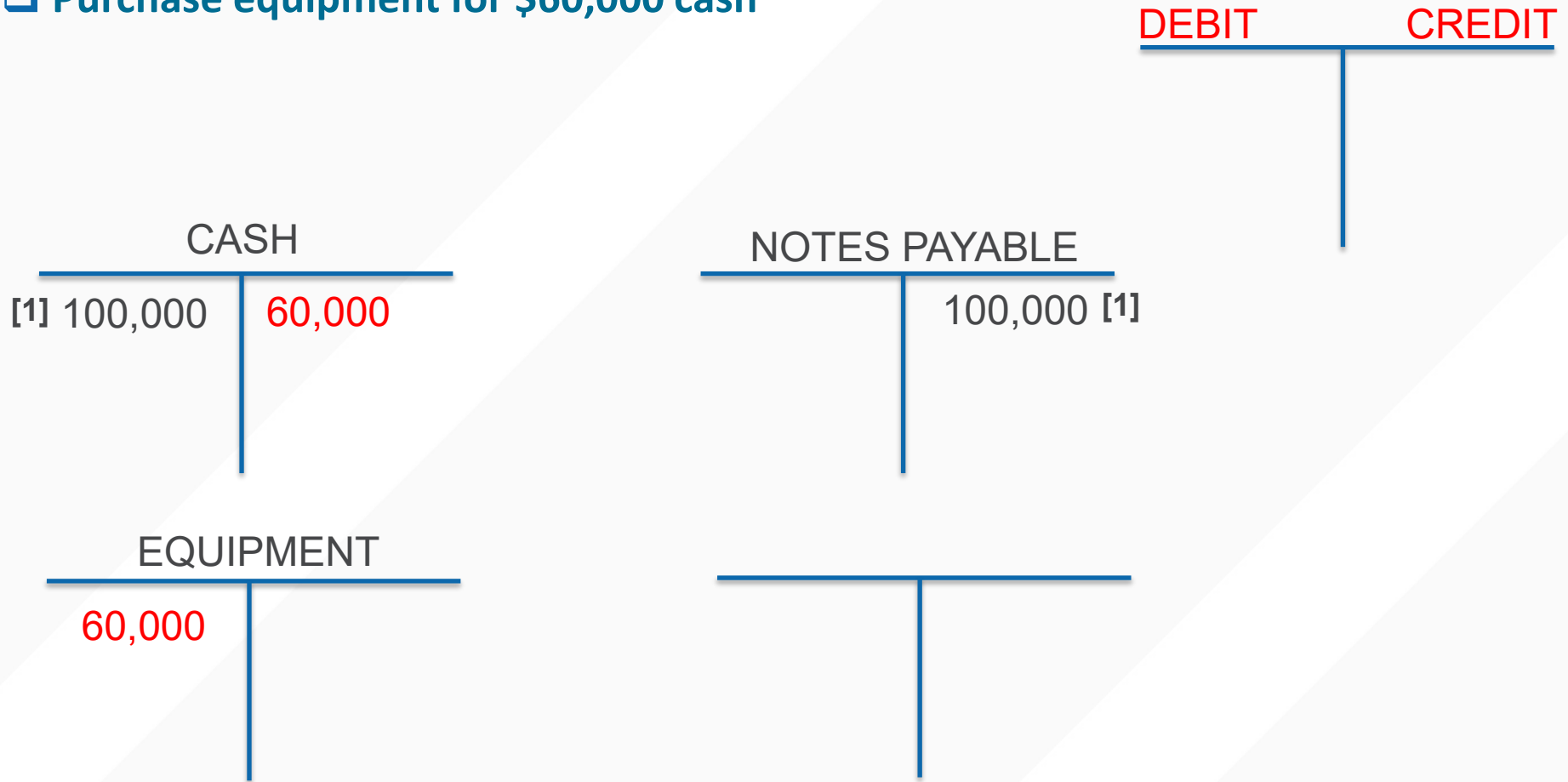
Double-entry Accounting

- ❑ Purchase equipment for \$60,000 cash



Double-entry Accounting

- ❑ Purchase equipment for \$60,000 cash



Double-entry Accounting

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
2.	Purchase equipment for \$60,000 cash.	+\$60,000 -\$60,000		
3.	Purchase inventory for \$15,000 on account.	+\$15,000	+\$15,000	
4.	Pay supplier \$8,000 cash of the \$15,000 owed.			
5.	Pay for one year insurance policy, \$600 in cash.			

Double-entry Accounting

- ❑ Purchase inventory for \$15,000 on account.

CASH	
[1] 100,000	60,000 [2]

EQUIPMENT	
[2] 60,000	

INVENTORY	
15,000	

NOTES PAYABLE	
	100,000 [1]

TRADE PAYABLE	
	15,000

DEBIT	CREDIT

Double-entry Accounting

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
2.	Purchase equipment for \$60,000 cash.	+\$60,000 -\$60,000		
3.	Purchase inventory for \$15,000 on account.	+\$15,000	+\$15,000	
4.	Pay supplier \$8,000 cash of the \$15,000 owed.	-\$8,000	-\$8,000	
5.	Pay for one year insurance policy, \$600 in cash.			

Double-entry Accounting

- Pay supplier \$8,000 cash of the \$15,000 owed.

CASH	
[1] 100,000	60,000 [2]
	8,000

EQUIPMENT	
[2] 60,000	

INVENTORY	
[3] 15,000	

NOTES PAYABLE	
	100,000 [1]

TRADE PAYABLE	
8,000	15,000 [3]

DEBIT	CREDIT

Double-entry Accounting

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
2.	Purchase equipment for \$60,000 cash.	+\$60,000 -\$60,000		
3.	Purchase inventory for \$15,000 on account.	+\$15,000	+\$15,000	
4.	Pay supplier \$8,000 cash of the \$15,000 owed.	-\$8,000	-\$8,000	
5.	Pay for one year insurance policy, \$600 in cash.	+\$600 -\$600		

Double-entry Accounting

- Pay for one year insurance policy, \$600 in cash.

CASH	
[1] 100,000	60,000 [2]
	8,000 [4]
	600

PREPAID INSURANCE	
600	

EQUIPMENT	
[2] 60,000	

INVENTORY	
[3] 15,000	

DEBIT		CREDIT	
NOTES PAYABLE		100,000 [1]	
TRADE PAYABLE		[4] 8,000	15,000 [3]

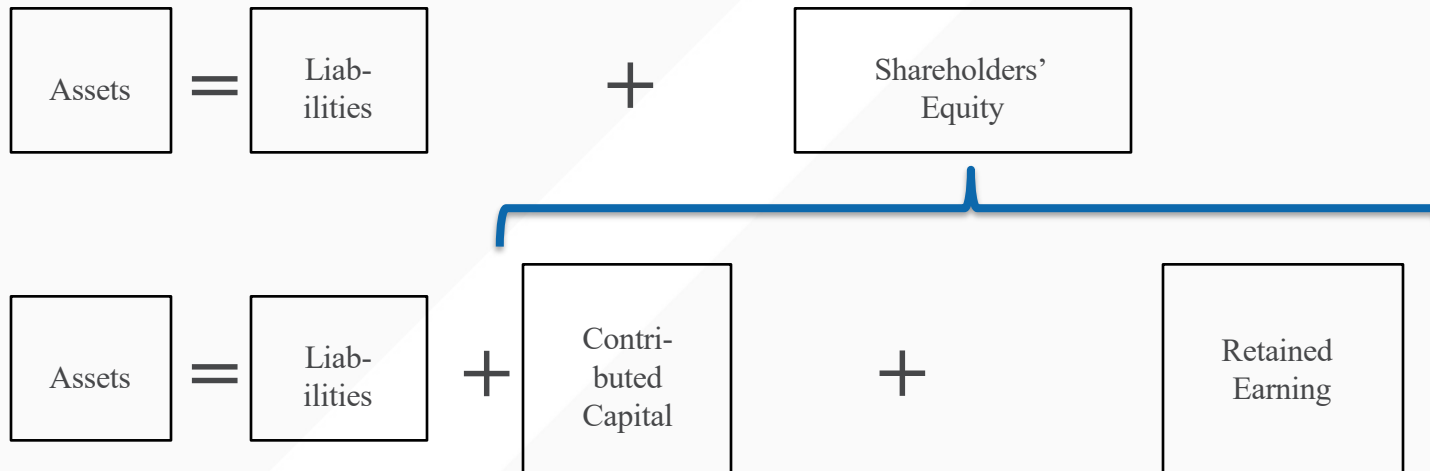
Accounting Equation

□ Let's expand the equation

$$\boxed{\text{Assets}} = \boxed{\begin{array}{c} \text{Liab-} \\ \text{ilities} \end{array}} + \boxed{\begin{array}{c} \text{Shareholders'} \\ \text{Equity} \end{array}}$$

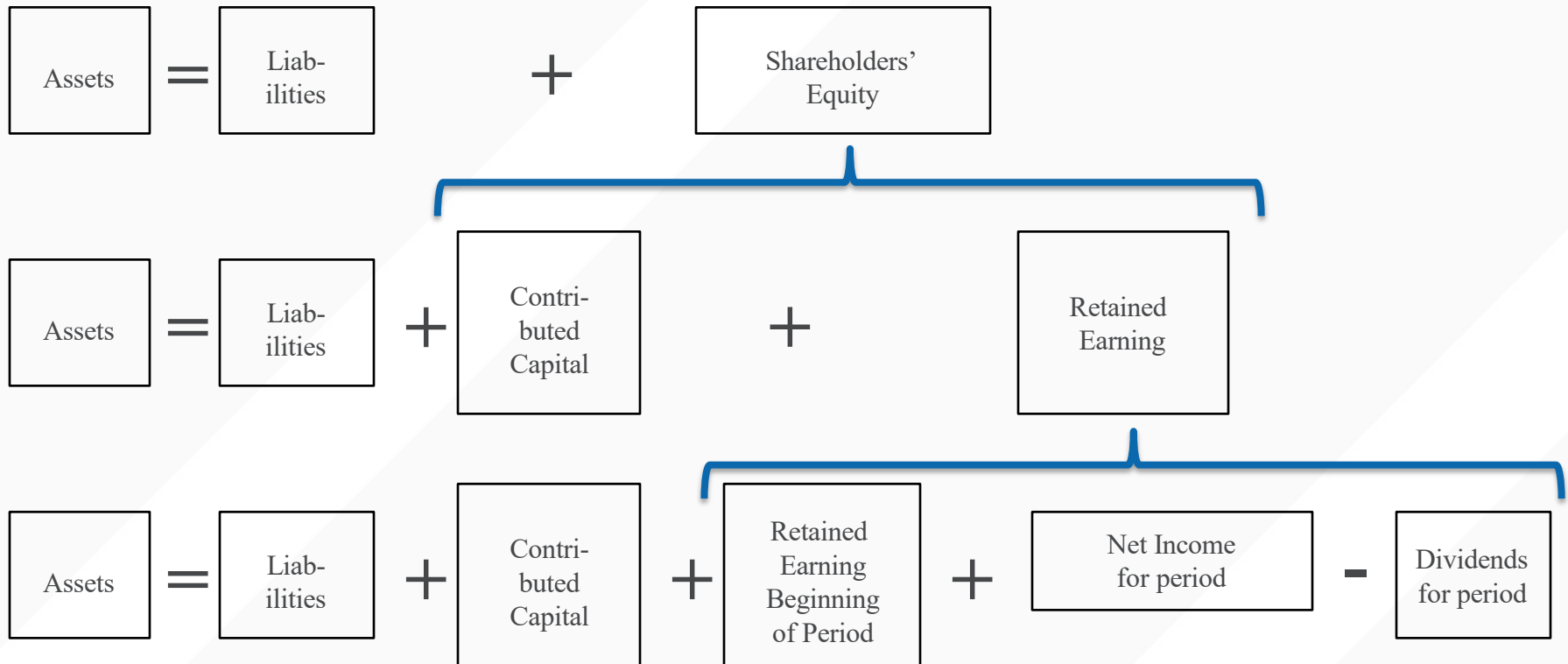
Accounting Equation

□ Let's expand the equation



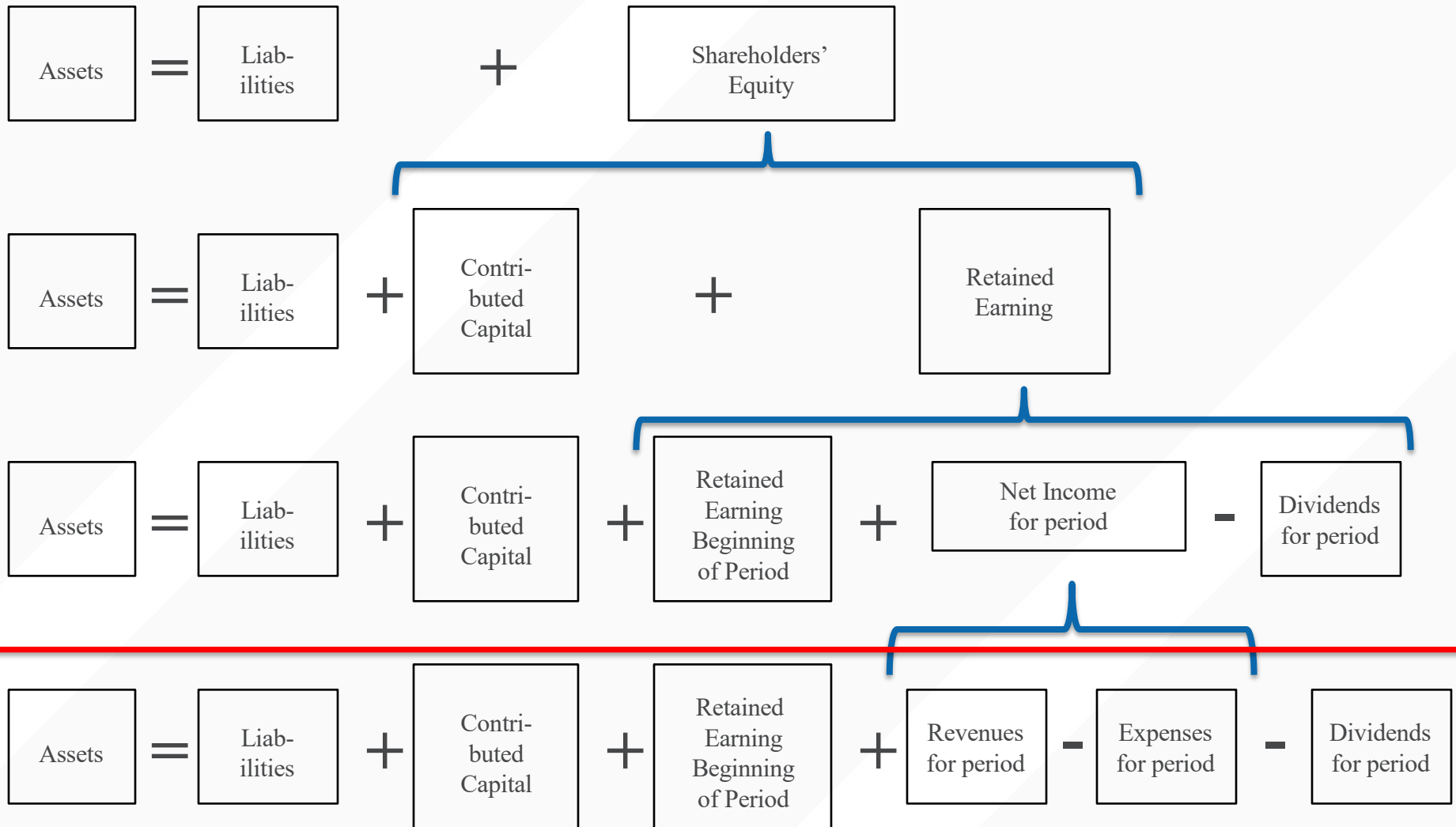
Accounting Equation

□ Let's expand the equation



Accounting Equation

Let's expand the equation

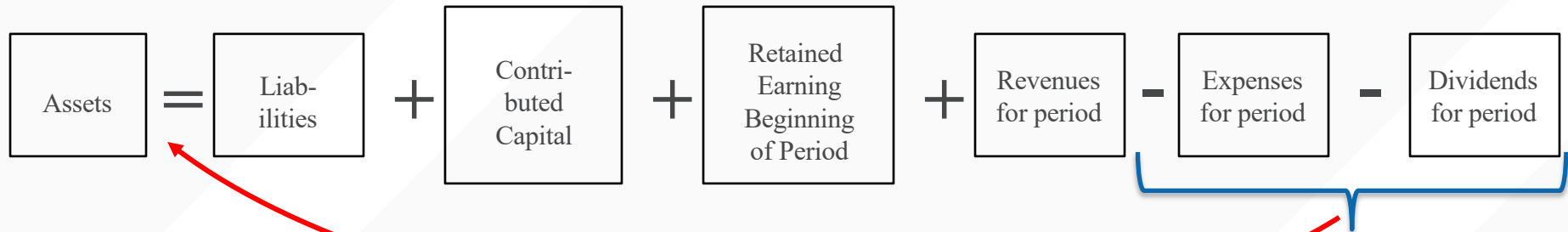


Accounting Equation

Let's expand the equation

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earning Beginning of Period} + \text{Revenues for period} - \text{Expenses for period} - \text{Dividends for period}$$

And then rearrange the equation:

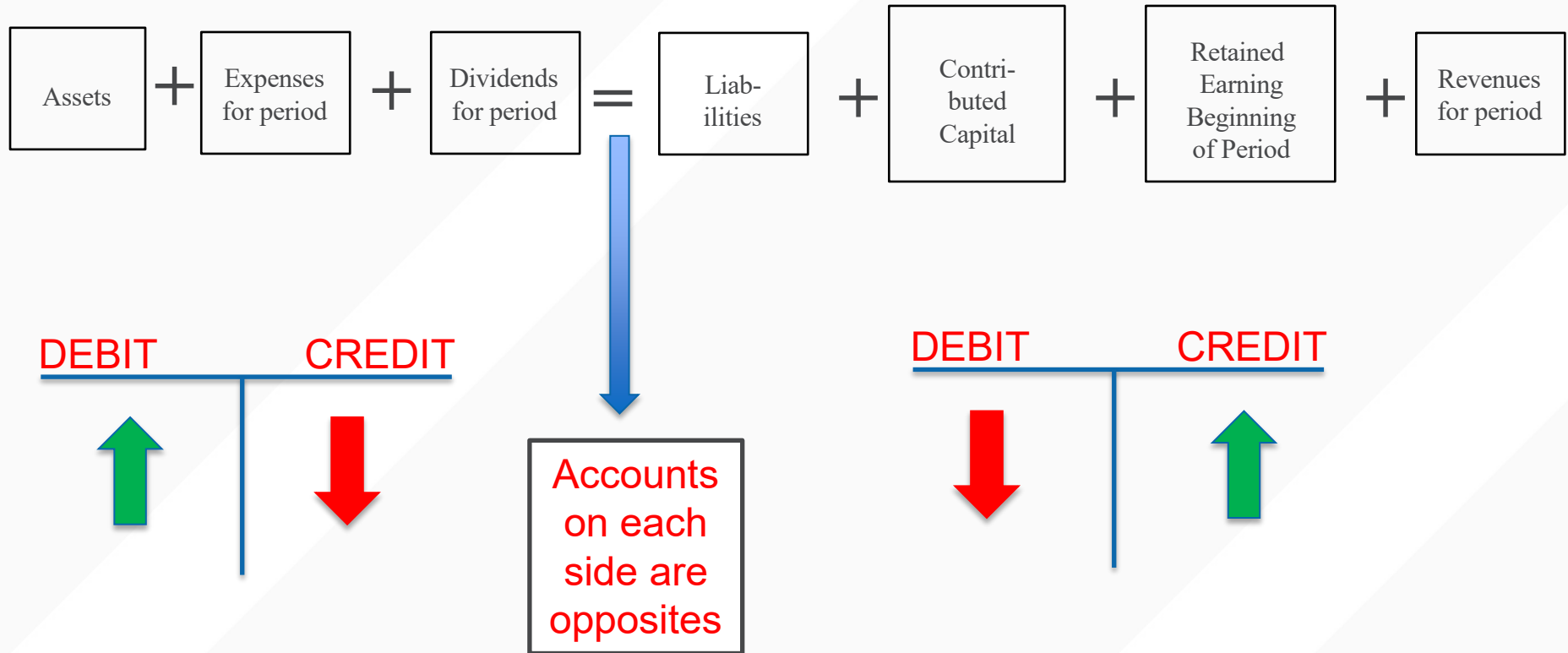
$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earning Beginning of Period} + \text{Revenues for period} - \text{Expenses for period} - \text{Dividends for period}$$


Rearranged:

$$\text{Assets} + \text{Expenses for period} + \text{Dividends for period} = \text{Liabilities} + \text{Contributed Capital} + \text{Retained Earning Beginning of Period} + \text{Revenues for period}$$

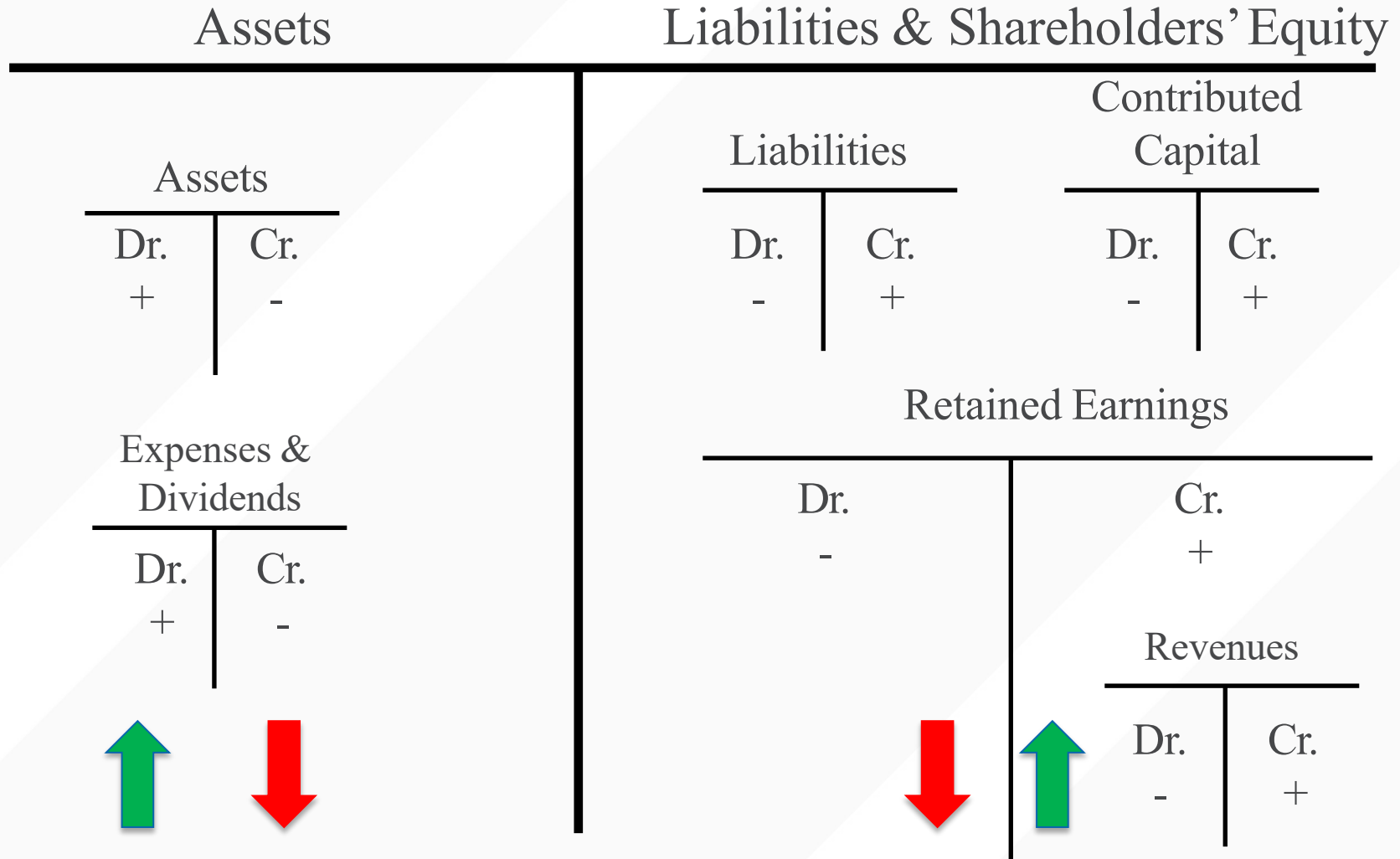
Double-entry Accounting

□ Rearranged equation:



Double-entry Accounting

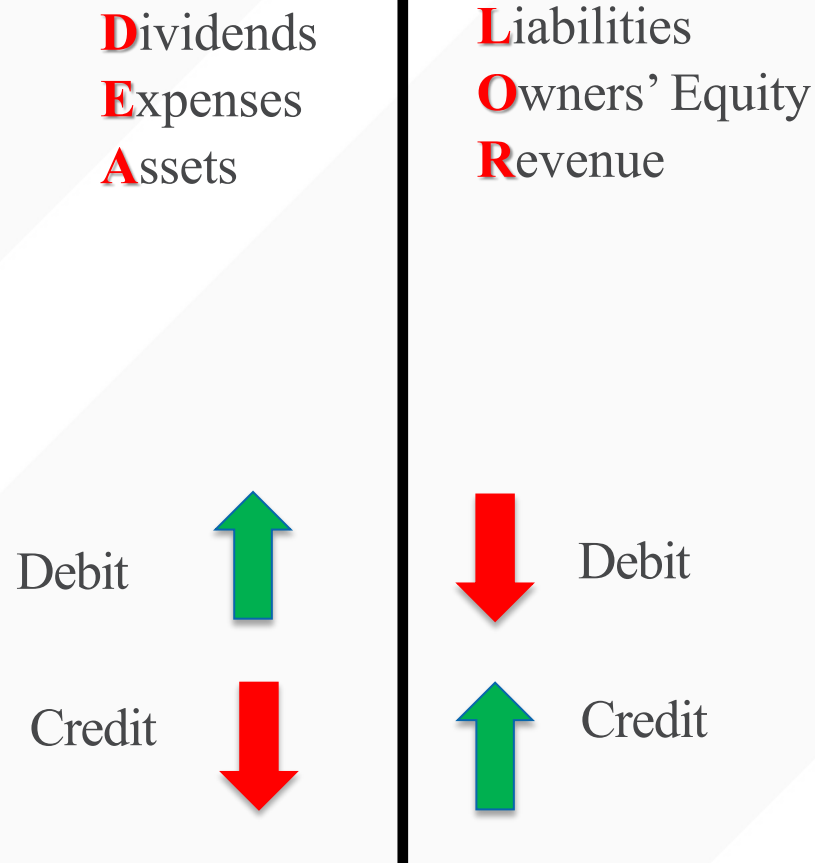
❑ Super T-account



Double-entry Accounting

❑ If you get stuck:

DEALOR



Double-entry Accounting

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
2.	Purchase equipment for \$60,000 cash.	+\$60,000 -\$60,000		
3.	Purchase inventory for \$15,000 on account.	+\$15,000	+\$15,000	
4.	Pay supplier \$8,000 cash of the \$15,000 owed.	-\$8,000	-\$8,000	
5.	Pay for one year insurance policy, \$600 in cash.	+\$600 -\$600		
6.	Issue 10,000 shares for \$100,000.	+\$100,000		+\$100,000

Double-entry Accounting

❑ Issue 10,000 shares for \$100,000.

CASH			
[1] 100,000	60,000	[2]	
100,000	8,000	[4]	
	600	[5]	

PREPAID INSURANCE	
[5] 600	

EQUIPMENT	
[2] 60,000	

COMMON STOCK	
	100,000

INVENTORY	
[3] 15,000	

DEBIT		CREDIT	
NOTES PAYABLE			
		100,000	[1]
TRADE PAYABLE			
[4] 8,000		15,000	[3]

Double-entry Accounting

□ Let's calculate ending balances

CASH	
100,000	60,000
100,000	8,000
	600

PREPAID INSURANCE	
600	
EB 600	

DEBIT	CREDIT

EQUIPMENT	
60,000	
EB 60,000	

COMMON STOCK	
	100,000
	100,000 EB

NOTES PAYABLE	
	100,000
	100,000 EB

INVENTORY	
15,000	
EB 15,000	

TRADE PAYABLE	
8,000	15,000

EB = Ending balance

Double-entry Accounting

□ Let's calculate ending balances

CASH	
100,000	60,000
100,000	8,000
	600

PREPAID INSURANCE	
600	
EB 600	

DEBIT	CREDIT

NOTES PAYABLE	
	100,000
	100,000 EB

COMMON STOCK	
	100,000
	100,000 EB

EB = Ending balance

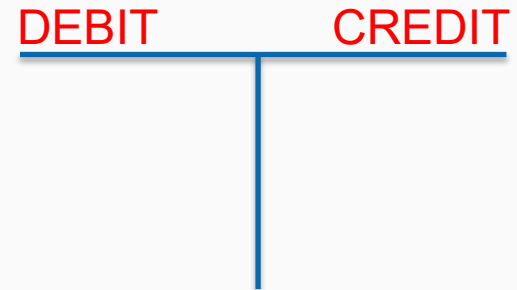
EQUIPMENT	
60,000	
EB 60,000	

INVENTORY	
15,000	
EB 15,000	

TRADE PAYABLE	
8,000	15,000

Double-entry Accounting

- ❑ Let's calculate ending balances
- ❑ The T-account is a useful representation of the equation:
BB + account increases – account decreases = EB
- ❑ Trade payable is a **liability** → debit decreases the liability



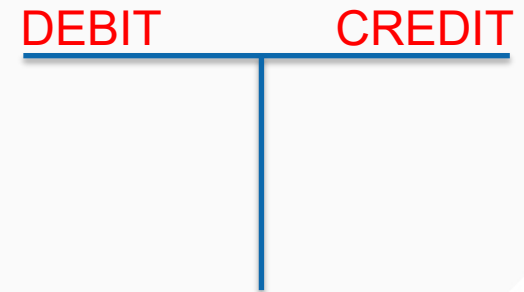
TRADE PAYABLE	
8,000	15,000
	7,000 EB

$$= 15,000 - 8,000 = 7,000 \text{ CREDIT}$$

BB = Beginning balance
EB = Ending balance

Double-entry Accounting

- ❑ Let's calculate ending balances
- ❑ Cash is an **asset** → credit decreases cash



CASH	
100,000	60,000
100,000	8,000
	600
<hr/>	
EB 131,400	

200,000 { 68,600 }

$$= 200,000 - 68,600 = 131,400 \text{ DEBIT}$$

EB = Ending balance

Double-entry Accounting

- ❑ **These ending balances will be on the balance sheet**

CASH	
100,000	60,000
100,000	8,000
	600
EB	131,400

EQUIPMENT	
	60,000
EB	60,000

INVENTORY	
15,000	
EB 15,000	

PREPAID INSURANCE	
600	
EB 600	

COMMON STOCK	
	100,000
	100,000 EB

EB = Ending balance

A blank T-account template. The word "DEBIT" is written in red at the top left, and "CREDIT" is written in red at the top right. A horizontal blue line separates the header from the body. A vertical blue line descends from the center of the horizontal line, creating two empty rectangular boxes for recording transactions.

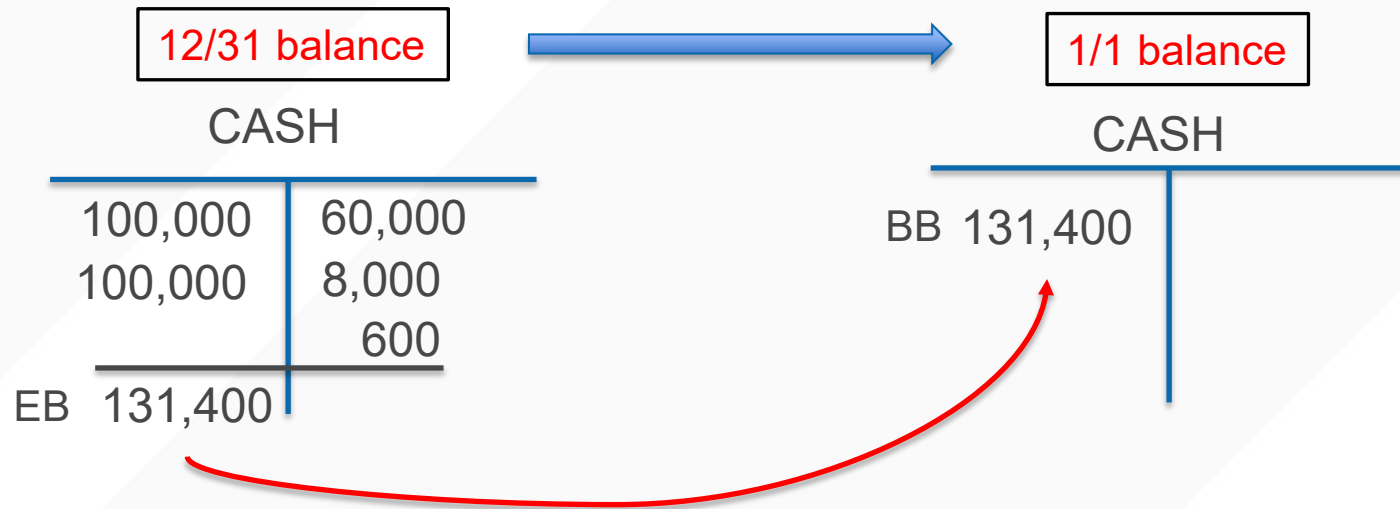
NOTES PAYABLE	
	100,000
	100,000 EB

TRADE PAYABLE	
8,000	15,000
	7,000 EB

Double-entry Accounting

- ❑ These ending balances will be on the balance sheet
- ❑ They'll be the beginning balances at the start of the next period

DEBIT CREDIT



BB = Beginning Balance
EB = Ending balance

Double-entry Accounting

- ❑ These ending balances will be on the balance sheet
- ❑ They will be the **beginning balances** at the start of the **next period**

DEBIT CREDIT

CASH	
BB 131,400	

PREPAID INSURANCE	
BB 600	

NOTES PAYABLE	
	100,000 BB

EQUIPMENT	
BB 60,000	

COMMON STOCK	
	100,000 BB

TRADE PAYABLE	
	7,000 BB

INVENTORY	
BB 15,000	

BB = Beginning balance

Double-entry Accounting

☐ Transactions are recorded as journal entries

- Same transaction rules apply:
 - We use debit (Dr) and credit (Cr).
 - Debits must equal credits for all transactions.
- Debits are recorded first, then indent the credit account

Debits = Credits

Double-entry Accounting

- ❑ Example: (1) On December 8, investors contributed \$10,000 cash to start La Colombiana Coffee Roasters, in exchange for 1,000 shares of stock



- Each posting in the T-account is accompanied by the number of the transaction for easier tracking

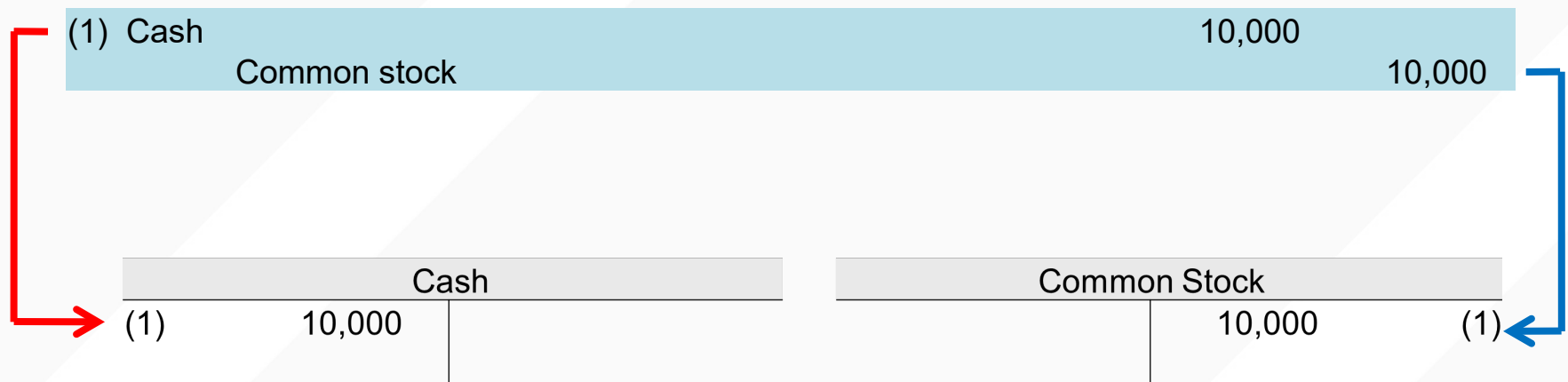
Double-entry Accounting

- Example: On December 8, investors contributed \$10,000 cash to start La Colombiana Coffee Roasters, in exchange for 1,000 shares of stock

Credit account names are indented from the left margin.		Credit amounts go in the right column	
(1) Cash		10,000	
	Common stock		10,000

Double-entry Accounting

- Example: On December 8, investors contributed \$10,000 cash to start La Colombiana Coffee Roasters, in exchange for 1,000 shares of stock



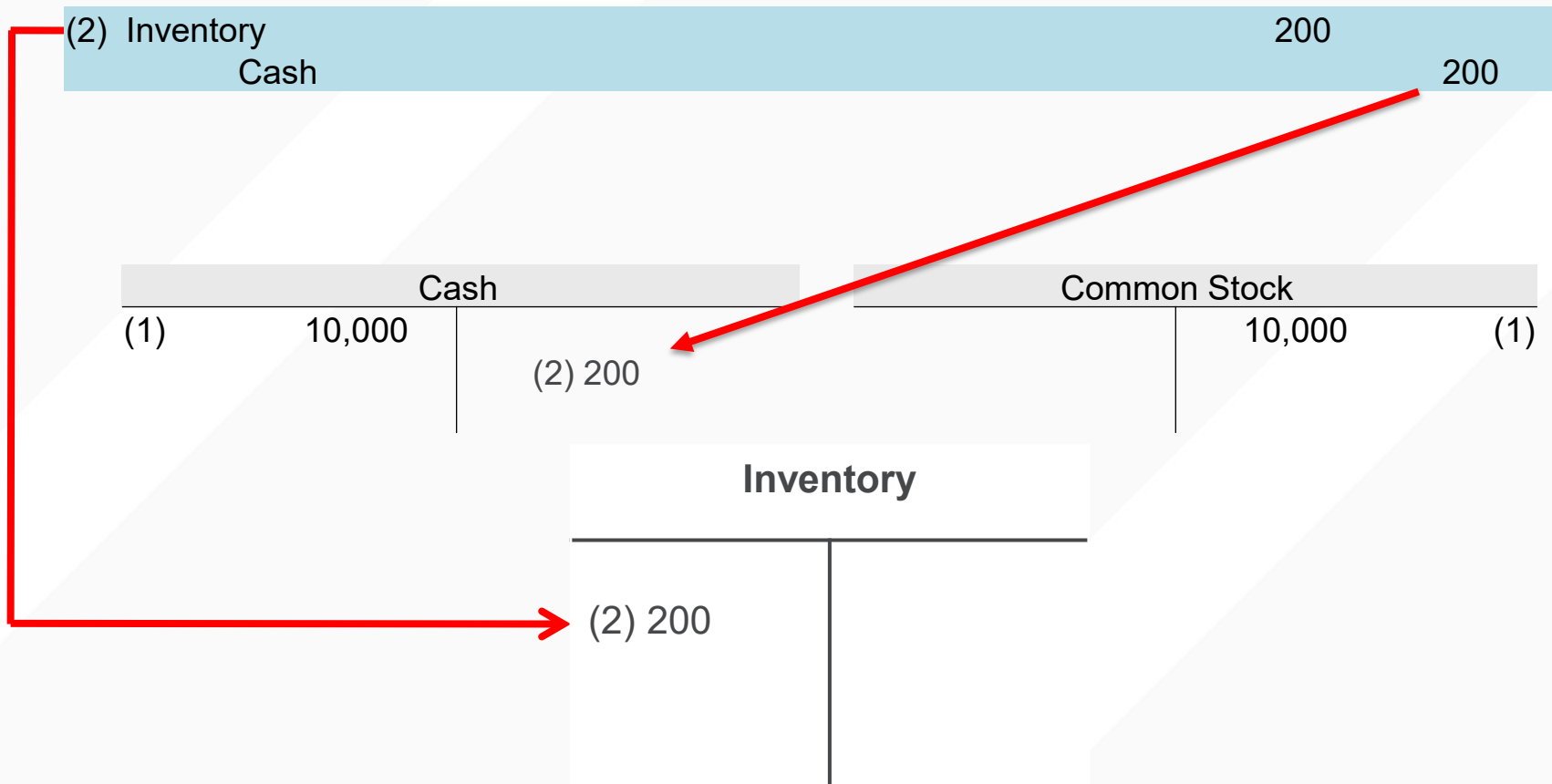
Double-entry Accounting

❑ Example: La Colombiana buys inventory for \$200

(2) Inventory	200	
Cash		200

Double-entry Accounting

❑ Example: Jana Juice buys inventory for \$200



Double-entry Accounting

❑ Let's record these transactions as journal entries

	Transaction	Assets =	Liability +	Equity
1.	Local bank loans you \$100,000.	+\$100,000	+\$100,000	
2.	Purchase equipment for \$60,000 cash.	+\$60,000 -\$60,000		
3.	Purchase inventory for \$15,000 on account.	+\$15,000	+\$15,000	
4.	Pay supplier \$8,000 cash of the \$15,000 owed.	-\$8,000	-\$8,000	
5.	Pay for one year insurance policy, \$600 in cash.	+\$600 -\$600		
6.	Issue 10,000 shares for \$100,000.	+\$100,000		+\$100,000

Double-entry Accounting

❑ Let's record these transactions as journal entries

	Transaction			
1.	Local bank loans you \$100,000.	(1) Cash	100,000	
		Notes Payable		100,000
2.	Purchase equipment for \$60,000 cash.	(2) Equipment	60,000	
		Cash		60,000
3.	Purchase inventory for \$15,000 on account.	(3) Inventory	15,000	
		Account Payable		15,000
4.	Pay supplier \$8,000 cash of the \$15,000 owed.	(4) Account Payable	8,000	
		Cash		8,000
5.	Pay for one year insurance policy, \$600 in cash.	(6) Prepaid Insurance	600	
		Cash		600
6.	Issue 10,000 shares for \$100,000.	(7) Cash	100,000	
		Common stock		100,000

Double-entry Accounting

From journal entries to T-accounts

1.	Cash	100,000	
	Notes Payable		100,000
2.	Equipment	60,000	
	Cash		60,000
3.	Inventory	15,000	
	Account Payable		15,000
4.	Account Payable	8,000	
	Cash		8,000
5.	Prepaid Insurance	600	
	Cash		600
6.	Cash	100,000	
	Common stock		100,000

Cash	
(1) 100	(2) 60
	(4) 8
	(5) 0.6
(6) 100	

Equipment	
(2) 60	

Inventory	
(3) 15	

Prepaid Insurance (A)	
(5) 0.6	

Notes Payable	
	(1) 100

Accounts Payable (L)	
(4) 8	(3) 15

Common Stock (SE)	
	(6) 100

☐ The accounting process so far

1. Analyze the transaction
2. Record the debits and credits (journal entries)
3. Post journal entries to ledger (T-accounts) → aggregate the accounts (end balance)

❑ Rules of Debits and Credits

- Every transaction affects (at least) two accounts.
- Every journal entry must have at least one debit and at least one credit.
- No negative numbers are allowed. An account either has a positive debit balance or a positive credit balance.
- Debits = credits for every transaction
- Debits = credits maintains the balance sheet equation, $A = L + SE$.

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THANK YOU!