

Weds
1/22

Test 1 - Wed 3/4

Test 2 - Wed 3/25

Test 3 - Wed 4/22

CAL STATE L.A. CALIFORNIA STATE UNIVERSITY, LOS ANGELES

Emergency Procedure

EVACUATION
• Evacuate the building using the nearest exit to the location of the alarm and to the nearest exit.
• Do not use elevators, escalators or stairs.
• Do not re-enter the building until authorized by the fire department.
• Assist individuals with disabilities.
• Assemble at the building evacuation assembly area unless otherwise instructed.
• Provide emergency personnel with relevant information.
• Remain at evacuation assembly point and do not re-enter building until authorized by emergency personnel.

911
PUBLIC SAFETY
POLICE, FIRE, AMBULANCE
ENVIRONMENTAL HEALTH AND SAFETY
FACILITIES SERVICES

ACTIVE SHOOTING OR VIOLENT INCIDENT
• If you are in a room with a door, make sure the door is closed. Close to the nearest exit of the room building, doors may lock automatically, manually or not at all.
• If applicable, use fire extinguishers, but do not use them if unsure.
• If you are in a room with a window, make sure the window is closed.
• Remain where you are until further direction from emergency personnel.

SHELTER IN PLACE
• Stay inside the building or proceed to a safe area.
• If you are in a room with a door, make sure the door is closed. Close to the nearest exit of the room building, doors may lock automatically, manually or not at all.
• If applicable, use fire extinguishers, but do not use them if unsure.
• If you are in a room with a window, make sure the window is closed.
• Remain where you are until further direction from emergency personnel.

POWER OUTAGE
• Remain calm.
• Evacuate if instructed to do so.
• Use caution when using flashlights.
• Use caution when using candles.
• Use caution when using generators.
• Use caution when using portable generators.
• Use caution when using portable generators.

EMERGENCY NOTIFICATION
• Follow instructions from emergency personnel.
• Do not use elevators, escalators or stairs.
• Do not re-enter the building until authorized by the fire department.
• Assist individuals with disabilities.
• Assemble at the building evacuation assembly area unless otherwise instructed.
• Provide emergency personnel with relevant information.
• Remain at evacuation assembly point and do not re-enter building until authorized by emergency personnel.

HAZARDOUS MATERIALS
• Evacuate the building immediately.
• Do not touch or move any materials.
• Do not use elevators, escalators or stairs.
• Do not re-enter the building until authorized by the fire department.
• Assist individuals with disabilities.
• Assemble at the building evacuation assembly area unless otherwise instructed.
• Provide emergency personnel with relevant information.
• Remain at evacuation assembly point and do not re-enter building until authorized by emergency personnel.

FIRE
• Evacuate the building immediately.
• Do not touch or move any materials.
• Do not use elevators, escalators or stairs.
• Do not re-enter the building until authorized by the fire department.
• Assist individuals with disabilities.
• Assemble at the building evacuation assembly area unless otherwise instructed.
• Provide emergency personnel with relevant information.
• Remain at evacuation assembly point and do not re-enter building until authorized by emergency personnel.

EARTHQUAKE
• Drop, cover and hold on.
• If you are in a room with a door, make sure the door is closed. Close to the nearest exit of the room building, doors may lock automatically, manually or not at all.
• If applicable, use fire extinguishers, but do not use them if unsure.
• If you are in a room with a window, make sure the window is closed.
• Remain where you are until further direction from emergency personnel.

Last time

$$\int \underbrace{f(x)}_u \underbrace{g'(x)}_{dv} dx = \underbrace{f(x)}_u \underbrace{g(x)}_v - \int \underbrace{g(x)}_v \underbrace{f'(x)}_{du} dx$$

$$\int u dv = uv - \int v du$$

Ex:

$$\int \underbrace{x}_u \underbrace{e^x dx}_{dv} = x e^x - \int e^x dx$$

$$\begin{array}{l} u = x \quad du = 1 \cdot dx = dx \\ dv = e^x dx \quad v = e^x \end{array}$$

$$= x e^x - e^x + C$$

What if you did it differently?

$$\int x e^x dx = \int \underbrace{e^x}_u \cdot \underbrace{x dx}_{dv}$$

$$= \frac{x^2}{2} e^x - \int \frac{x^2}{2} e^x dx$$

$$\begin{array}{l} u = e^x \quad du = e^x dx \\ dv = x dx \quad v = \frac{x^2}{2} \end{array}$$

this is even worse!

Ex: $\int \underbrace{x^2}_u \underbrace{\sin(x)}_{dv} dx = -x^2 \cos(x) + \int \underbrace{2x}_u \underbrace{\cos(x)}_{dv} dx = -x^2 \cos(x) + \left[\underbrace{2x \sin(x)}_{uv} - \int \underbrace{2}_{v} \underbrace{\sin(x)}_{du} dx \right]$

$\int u dv = uv - \int v du$

$u = x^2 \quad du = 2x dx$
 $dv = \sin(x) dx \quad v = -\cos(x)$

$u = 2x \quad du = 2 dx$
 $dv = \cos(x) dx \quad v = \sin(x)$

$= -x^2 \cos(x) + 2x \sin(x) + 2 \cos(x) + C$

Ex:

$$\int u dv = uv - \int v du$$

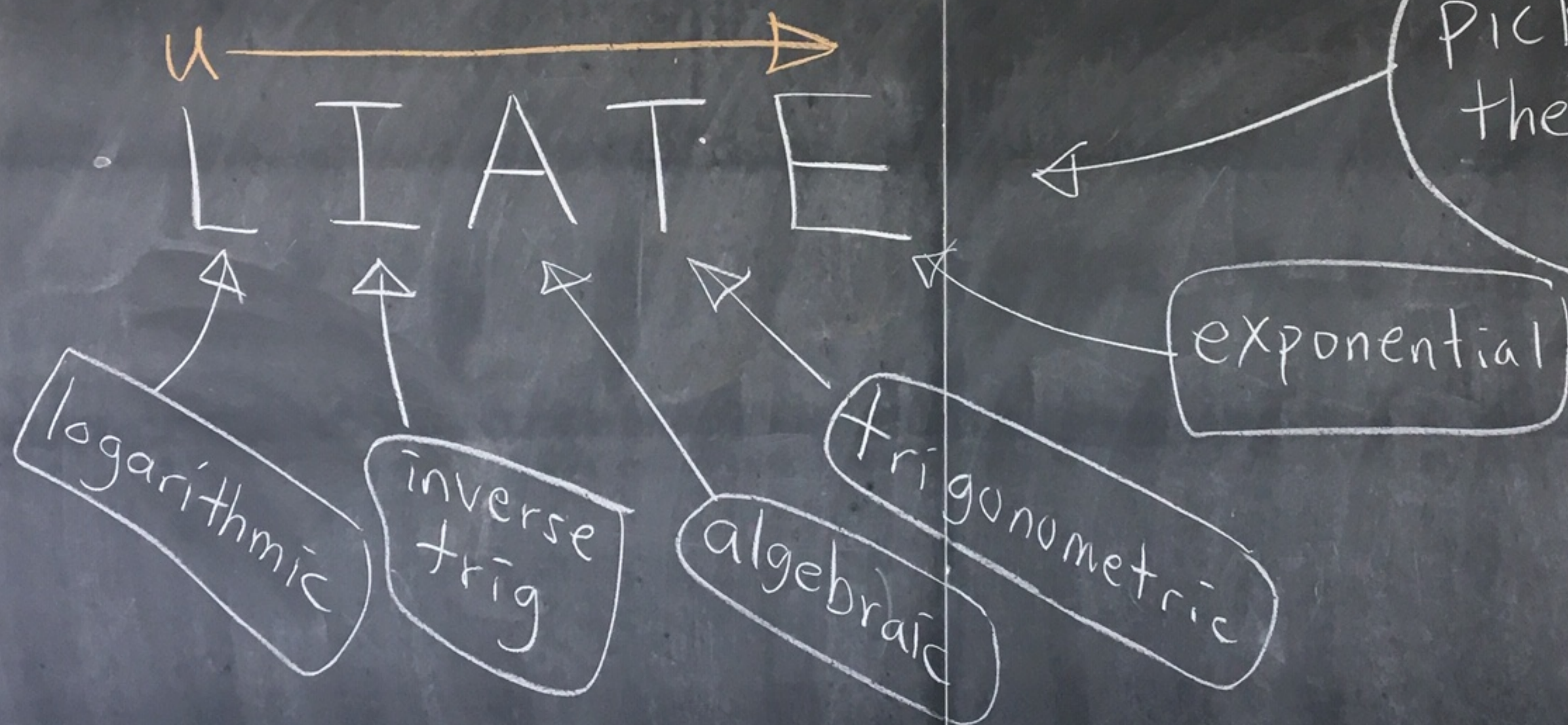
$$\int \underbrace{\ln(x)}_u \underbrace{dx}_{dv=1 \cdot dx}$$

$$= x \ln(x) - \int x \cdot \frac{1}{x} dx = x \ln(x) - \int dx$$

$$\begin{array}{l} u = \ln(x) \quad du = \frac{1}{x} dx \\ dv = 1 \cdot dx \quad v = x \end{array}$$

$$= x \ln(x) - x + C$$

How do you pick u and dv ?



pick u to be the earliest in the list

$$\textcircled{14} \int \underbrace{\theta}_u \underbrace{\sec^2(\theta)}_{dv} d\theta$$

algebraic trigonometric

$$\theta \tan(\theta) - \int \tan(\theta) d\theta$$

$$\begin{aligned} u &= \theta & du &= 1 \cdot d\theta \\ dv &= \sec^2(\theta) d\theta & v &= \tan(\theta) \end{aligned}$$

$$\theta \tan(\theta) - \ln|\sec(\theta)| + C$$

Ex: $\int \tan(\theta) d\theta = \int \frac{\sin(\theta)}{\cos(\theta)} d\theta$

$$= \int -\frac{1}{u} du = -\ln|u| + C = -\ln|\cos(\theta)| + C$$

$$= \ln|\cos(\theta)^{-1}| + C = \ln|\sec(\theta)| + C$$

$$\begin{aligned} u &= \cos(\theta) \\ du &= -\sin(\theta) d\theta \\ -du &= \sin(\theta) d\theta \end{aligned}$$

Ones to
remember

$$\int \ln(x) dx = x \ln(x) - x + C$$

$$\int \tan(x) dx = \ln|\sec(x)| + C$$