

8/19/ Calc 3

Contact Info:

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Off hrs

2-5

M-R

Text University Calculus

Early transcendentals

Hass-Heil, -

Thomas

Calculator: TI-83/84 → STAT

Grading:

HW

10

Q

10

Ex1

15

Ex2

15

Ex 3 15
Final 35

12/10 Tuesday 11:00-13:00

88-90

90 $\frac{A}{B}$

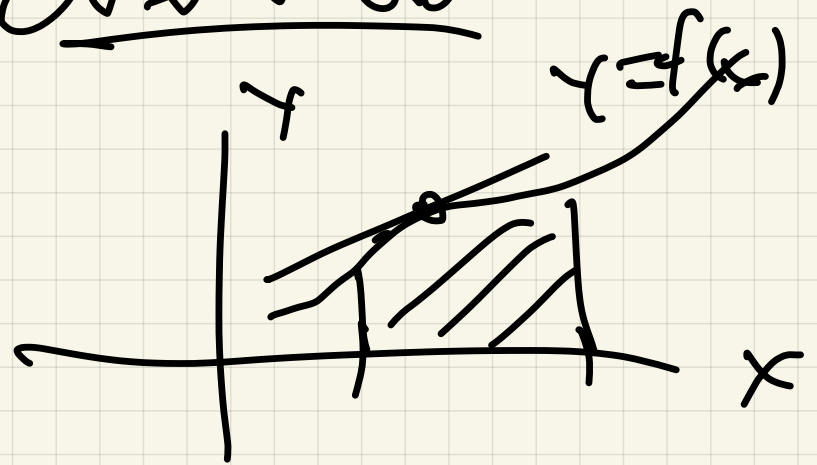
78-80

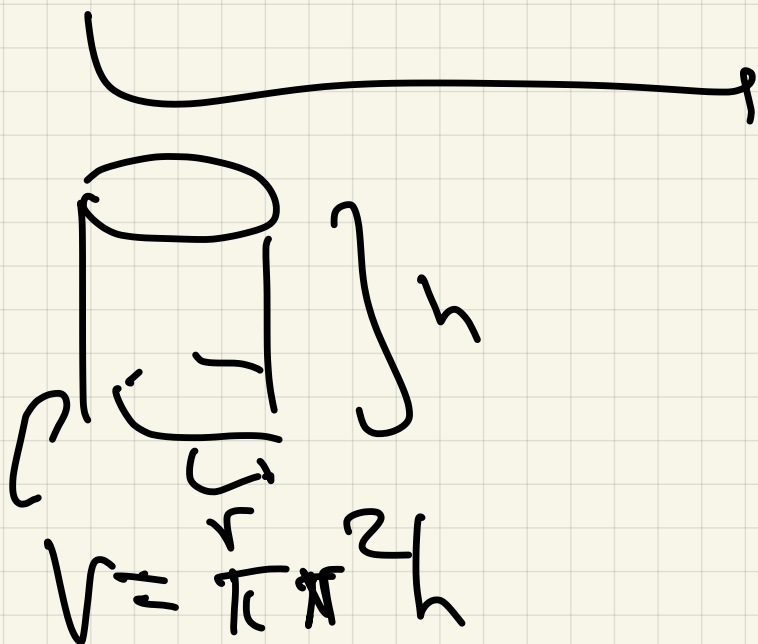
80
70 C

Weekly Planner

Overview

Calc 1
+
Calc 2





Limits

- Derivatives
- compute
- graph
- max/min
- rate change

Integrals

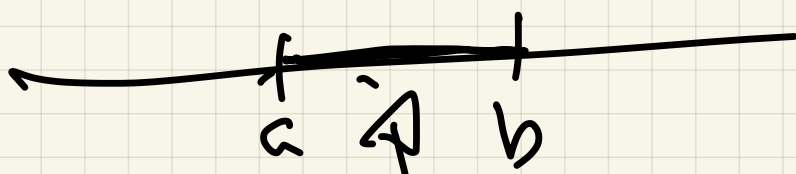
- compute
- applications

Power series

Our course

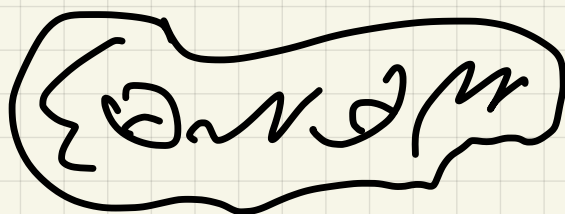
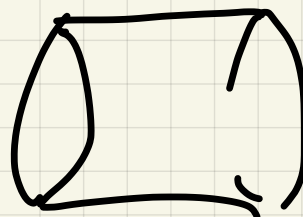
- Ch 11 Vectors in 2D + 3D
- Ch 12 Functions $y = f(x)$, x vector
- Ch 13 Partial derivatives, chain rule, max/min
- Ch 14 Integrals

Calcl 1 $\int_a^b f(x) dx$



Calcl 3 $\int_S f(x) dA$

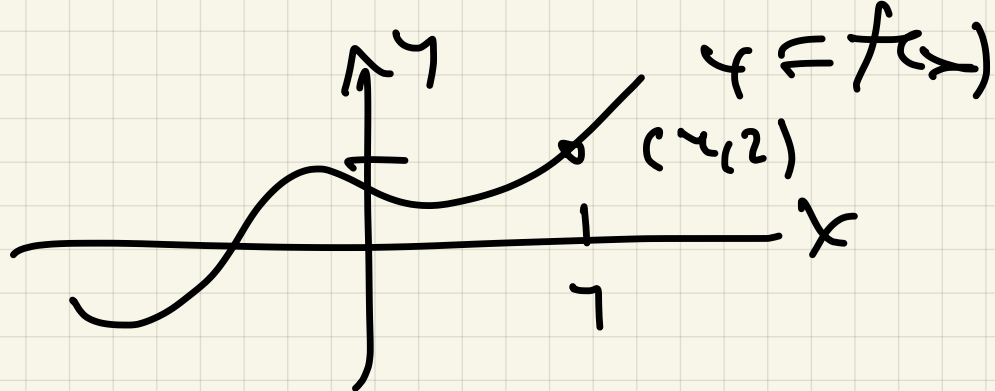
$S =$ 



Ch 15 Vector calculus
Vector fields

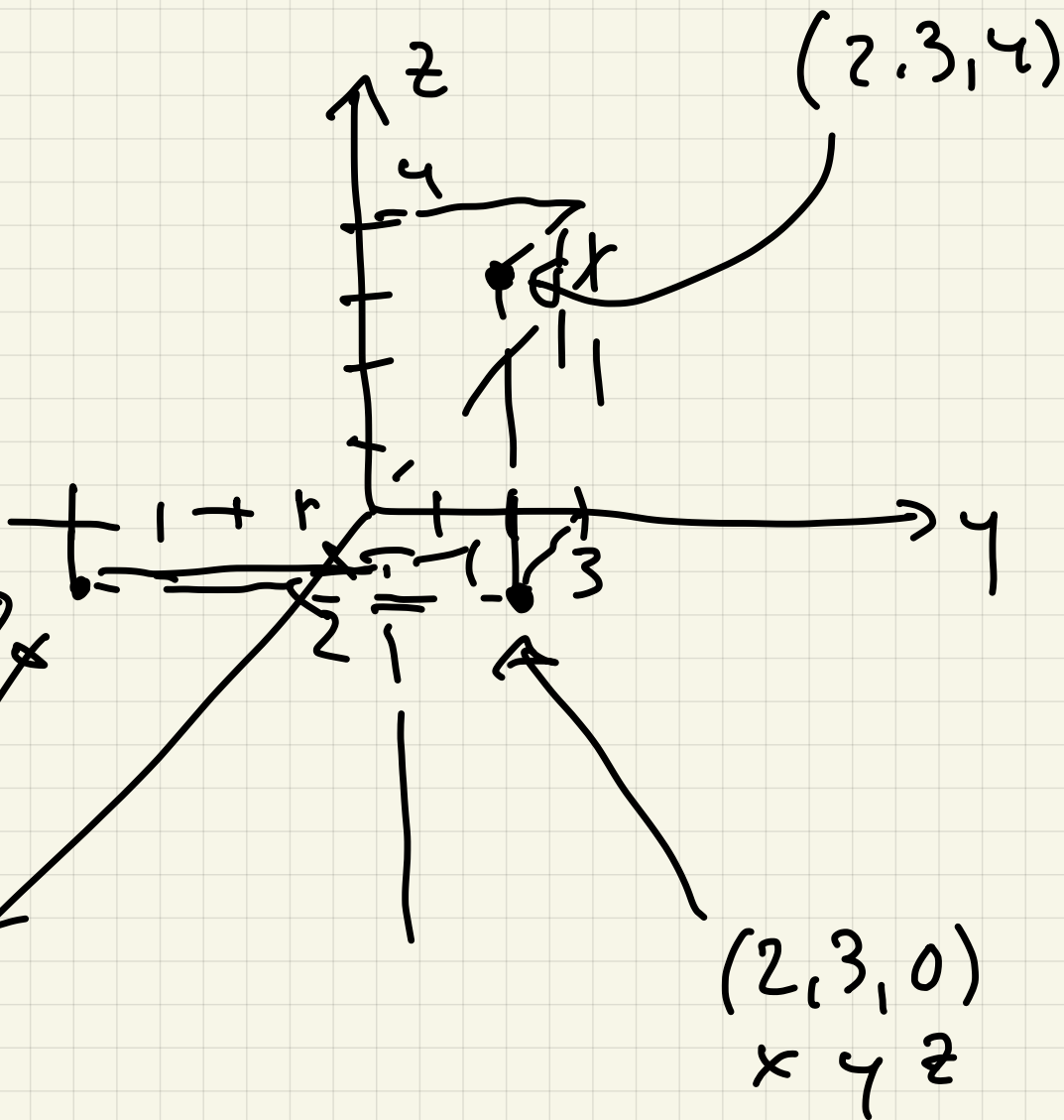
§ 11.1
 \mathbb{R}

\mathbb{R}^2



Calc 3 :

Ex 1



$(0, -4, -1)$

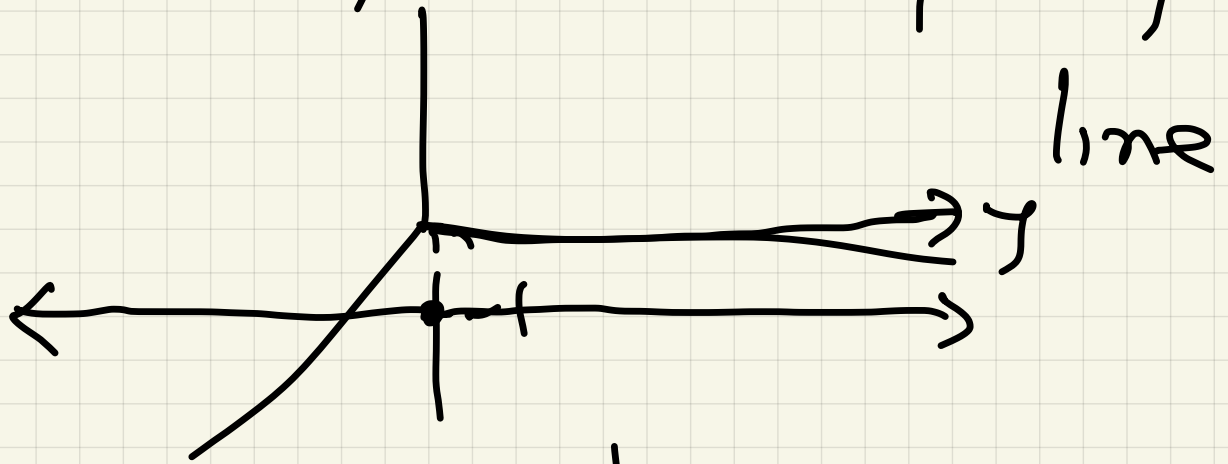
$(2, 3, 0)$
x y z

Ex 2 Describe / sketch sets

(a) $x=0, y=-4, z=1$

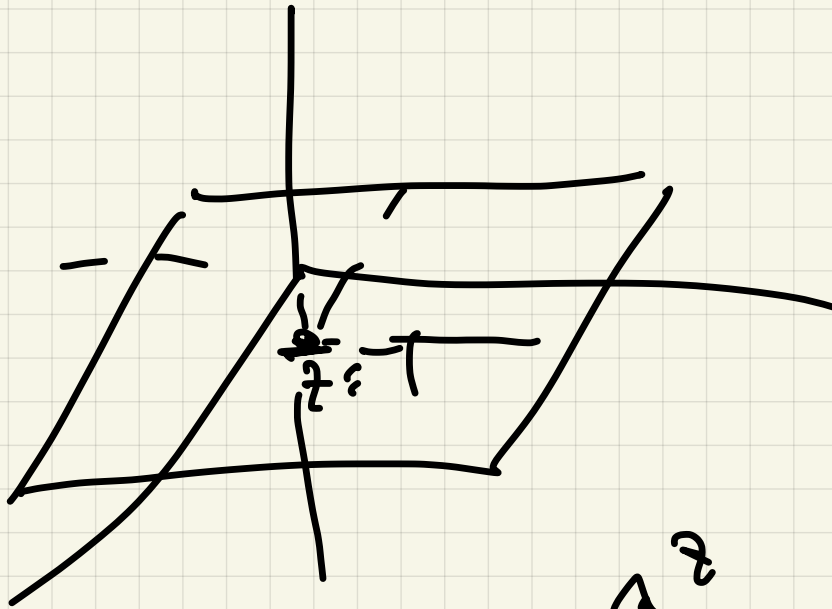
point

(b) $x=0, z=-1$ (y any value)



(c)

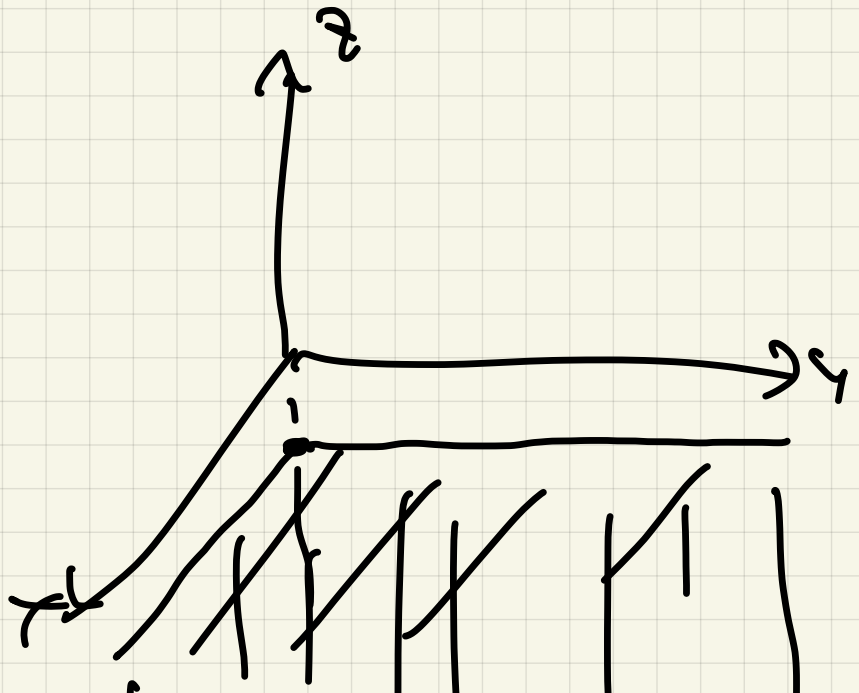
$z=-1$ plane



(d)

$z \leq -1$

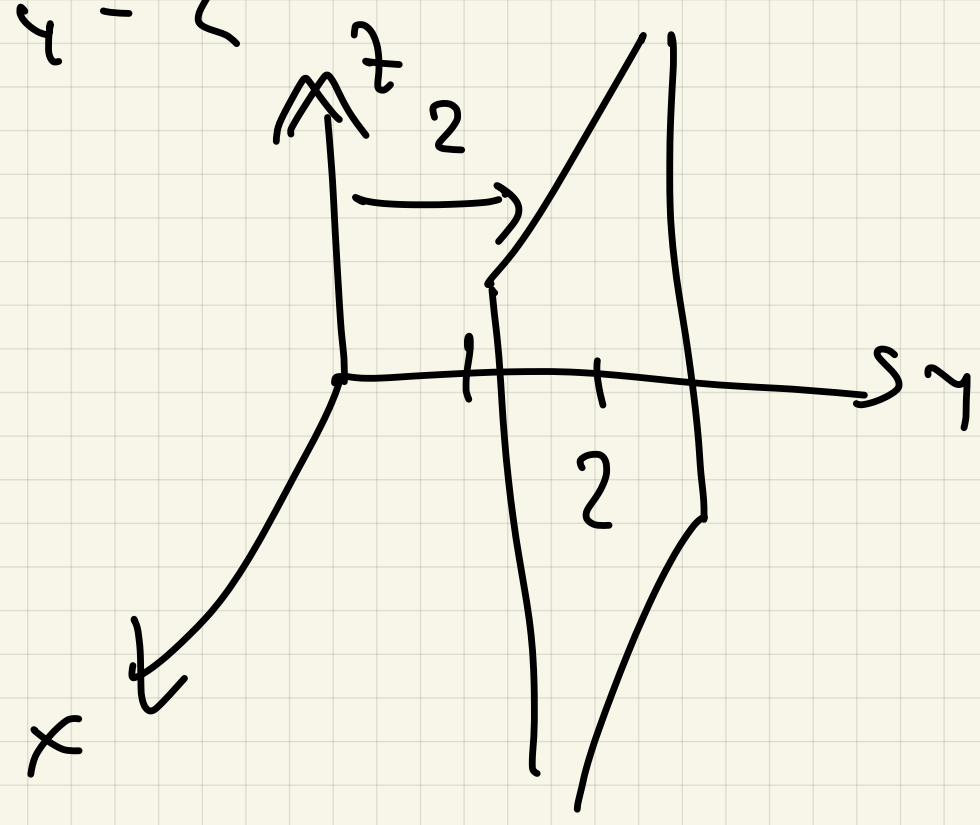
solid



||| | | | |

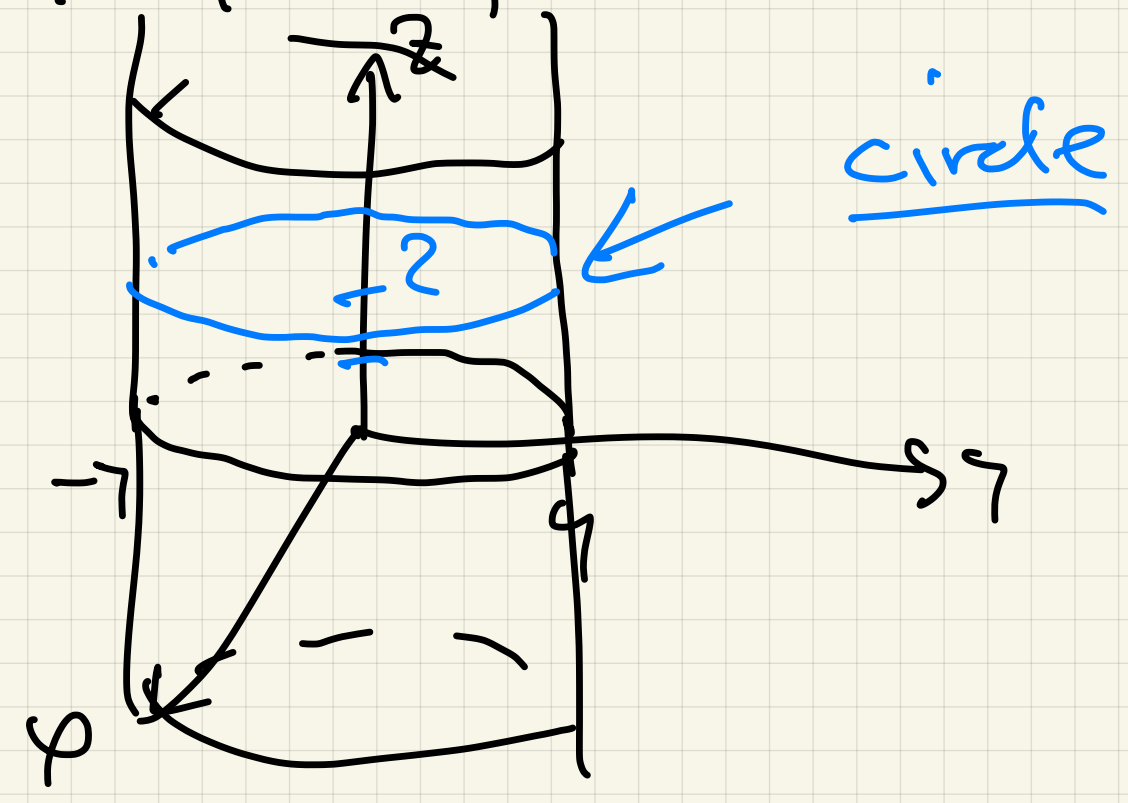
(e)

$$z = 2$$



(f)

$$x^2 + y^2 = 16, \quad z = 2$$



(9)

$$x^2 + y^2 \leq 16, z = 2$$

disk

