

Example 01

```

from manim import *

class Myscene(Scene):

    def construct(self):

        text1 = Text("This is a text created using the Manim library",
                    color=LIGHT_PINK,
                    font_size=40)

        self.play(Write(text1), runtime=5)
        self.wait(5)
        self.play(FadeOut(text1))

        text2 = Tex("This is a text created using LaTeX.",
                  color=YELLOW,
                  font_size=40)

        self.play(Write(text2), runtime=5)
        self.wait(5)
        self.play(FadeOut(text2))

        text3 = MathTex(r"\begin{bmatrix} f(\epsilon_1) \\ f(\epsilon_2) \\ f(\epsilon_3) \\ \vdots \end{bmatrix}",
                       color = BLUE,
                       font_size = 120)

        self.play(Write(text3), runtime=5)
        self.wait(5)
        self.play(FadeOut(text3))

```

Example 02

```

from manim import *

class Myscene(Scene):

    def construct(self):

        text = MathTex(r"\frac{\pi}{2}", color=YELLOW)
        text2 = Tex("Approximately", color=RED)
        text3 = Tex("is equal to 1.5707...", color=RED)
        text.next_to(text2, RIGHT)
        text3.next_to(text, RIGHT)

        group = VGroup(text, text2, text3)
        group.move_to(ORIGIN)

        self.play(Write(group))
        self.wait(1)

        text4 = Tex(r"which means that", r"$\frac{\pi}{2} \thickapprox 1.5707$", color=RED)
        text4[1].set_color(YELLOW)
        text4.next_to(group, DOWN)

        self.play(Write(text4))
        self.wait(5)

```

Exmample 03

```

from manim import *
import numpy as np

class Myscene(Scene):

    def construct(self):

        array = np.linspace(1,3, 6)

        old_c = Circle(radius = 1).set_opacity(1)
        old = Text(str(f'{array[0]:.2f}')).next_to(old_c, UP)
        self.play(Write(old))
        self.play(Create(old_c))
        for i in array:
            new_c = Circle(radius = i).set_opacity(1)
            new = Text(f'{i:.2f}').next_to(new_c, UP)
            self.play(Transform(old, new), Transform(old_c, new_c), run_time=1)

        self.wait(5)

```