Suma_de_Vectores

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1 Suma de Vectores

1.0.1 Trabajo realizado por: Jessica Naomi Millan Sánchez

1.0.2 Graficación Computacional

1.0.3 Profesora: Hazem Álvarez Rodríguez

1.0.4 Clase del 23 de septiembre de 2024

Graficar los vectores vistos en clase:

A = (2,4)

B = (-6,-2)

C = (2, -7)

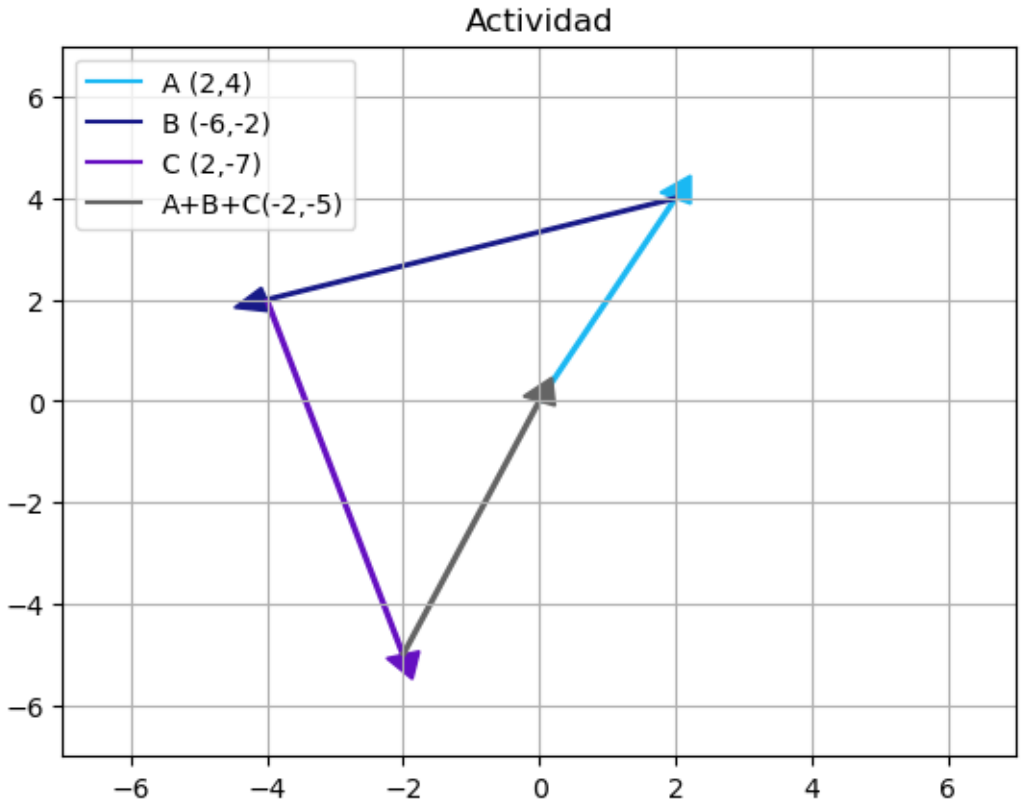
Encontrar el vector resultante de la suma de los 3 vectores A, B y C

[3]:
```
import numpy as np
import matplotlib.pyplot as plt
```

[ ]:
```
        # x, y, incremento, abcisa, longitud, ancho, color
plt.arrow(0,0,2,4,head_length=0.5, head_width=0.5, color=(26/255,184/255,243/
 ↪255), width=0.05)
plt.arrow(2,4,-6,-2,head_length=0.5, head_width=0.5, color=(23/255,25/255,136/
 ↪255), width=0.05)
plt.arrow(-4,2,2,-7,head_length=0.5, head_width=0.5, color=(101/255,15/255,193/
 ↪255), width=0.05)
plt.arrow(-2,-5,2,5,head_length=0.5, head_width=0.5, color=(100/255,100/255,100/
 ↪255), width=0.05)

plt.plot([], [], color=(26/255, 184/255, 243/255), label='A (2,4)')
plt.plot([], [], color=(23/255, 25/255, 136/255), label='B (-6,-2)')
plt.plot([], [], color=(101/255,15/255,193/255), label='C (2,-7)')
plt.plot([], [], color=(100/255,100/255,100/255), label='A+B+C(-2,-5)')

plt.legend(loc='upper left')
```

[33]:
```
x1=-7
x2=7
y1=-7
y2=7

# Crear el eje
plt.axis([x1,x2,y1,y2])

# Habilitar el grid
plt.grid(True)
plt.axis('on')
plt.title('Actividad')
```

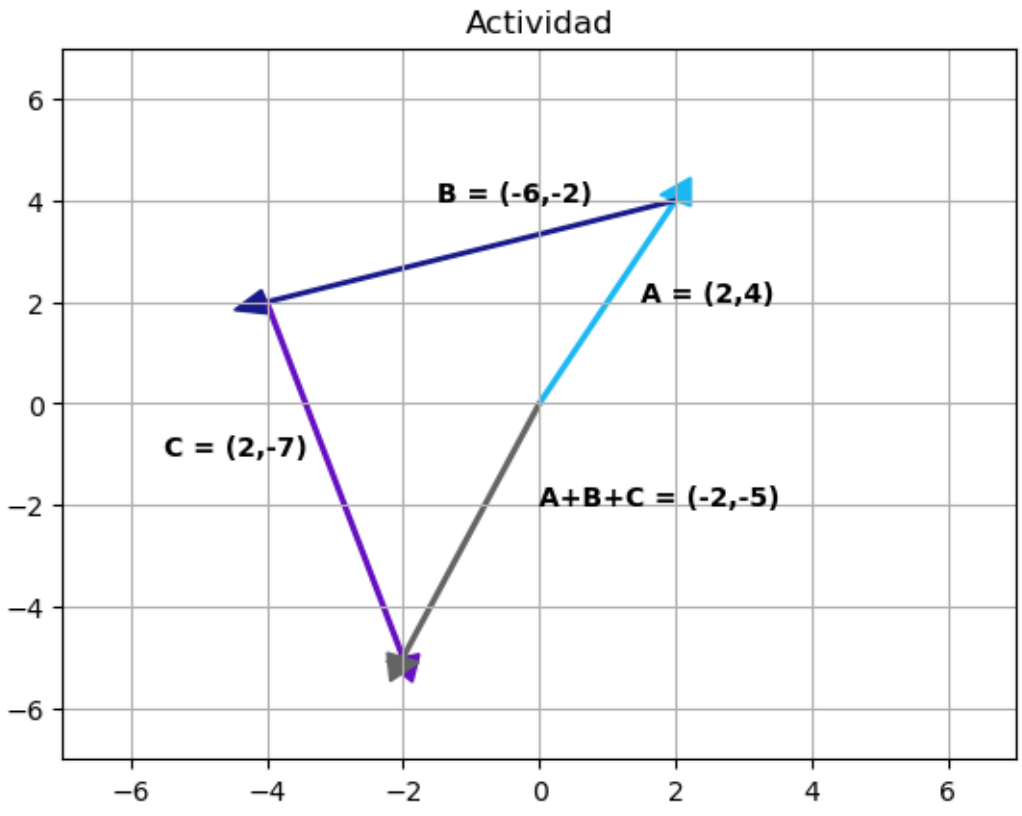
[33]:
```
<matplotlib.legend.Legend at 0x7222187e45f0>
```



[42]:
```
x1=-7
x2=7
y1=-7
y2=7
```

```
# Crear el eje
plt.axis([x1,x2,y1,y2])

# Habilitar el grid
plt.grid(True)
plt.axis('on')
plt.title('Actividad')

        # x, y, incremento, abcisa, longitud, ancho, color
plt.arrow(0,0,2,4,head_length=0.5, head_width=0.5, color=(26/255,184/255,243/
 ↪255), width=0.05)
plt.arrow(2,4,-6,-2,head_length=0.5, head_width=0.5, color=(23/255,25/255,136/
 ↪255), width=0.05)
plt.arrow(-4,2,2,-7,head_length=0.5, head_width=0.5, color=(101/255,15/255,193/
 ↪255), width=0.05)
plt.arrow(0,0,-2,-5,head_length=0.5, head_width=0.5, color=(100/255,100/255,100/
 ↪255), width=0.05)

plt.text(1.5,2,'A = (2,4)', fontweight="bold")
plt.text(-1.5,4,'B = (-6,-2)', fontweight="bold")
plt.text(-5.5,-1,'C = (2,-7)', fontweight="bold")
plt.text(0,-2,'A+B+C = (-2,-5)', fontweight="bold")
```

[42]:
```
Text(0, -2, 'A+B+C = (-2,-5)')
```


Actividad
B = (-6,-2)
A = (2,4)
C = (2,-7)
A+B+C = (-2,-5)
6
4
2
0
−2
−4
−6
−6
−4
−2
0
2
4
6