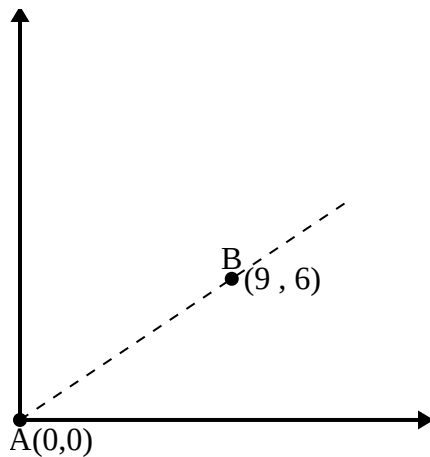




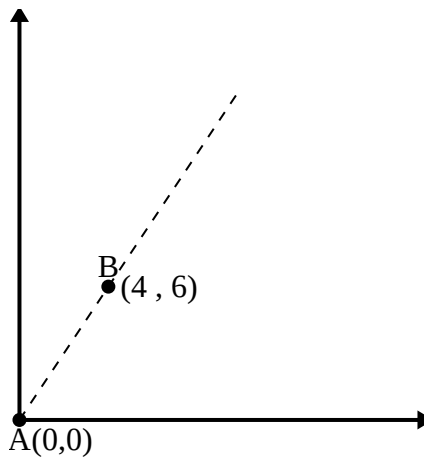
Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



2)



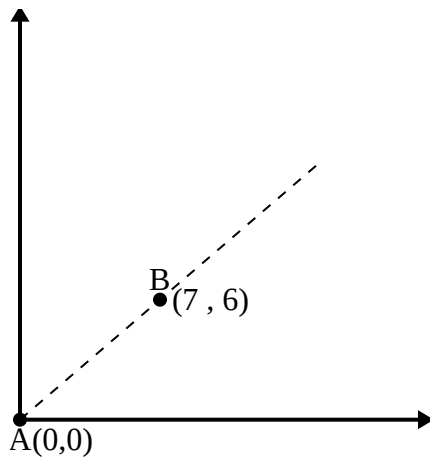
1. _____

2. _____

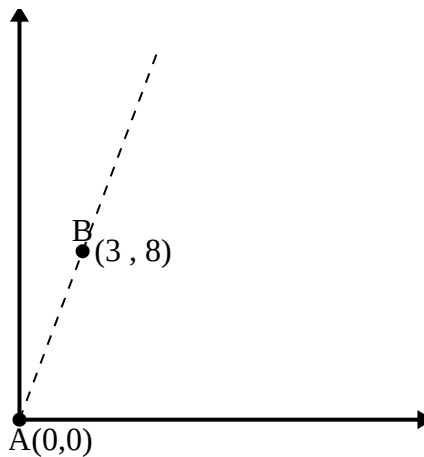
3. _____

4. _____

3)

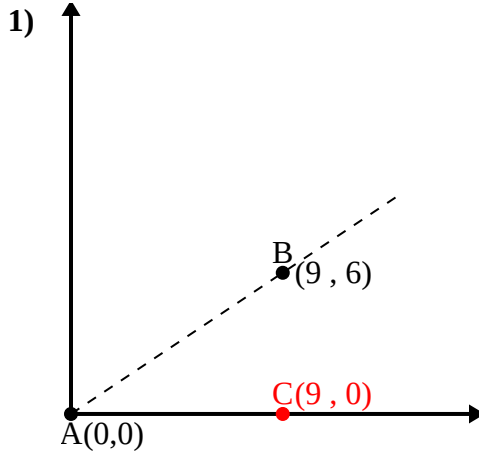


4)





Use the law of Cosines to find the point B's angle relative to point A.

Answers

$$\overline{AB} \text{ length} = 10.82$$

$$\overline{AC} \text{ length} = 9$$

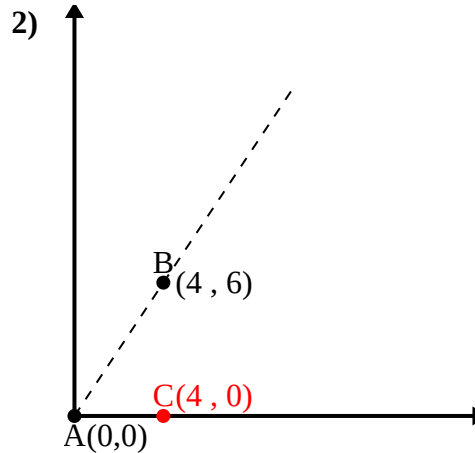
$$\overline{BC} \text{ length} = 6$$

$$(117 + 81 + 36) \div (2 \times 10.82 \times 9)$$

$$0.83$$

$$\cos^{-1}(0.83)$$

$$33.69^\circ$$



$$\overline{AB} \text{ length} = 7.21$$

$$\overline{AC} \text{ length} = 4$$

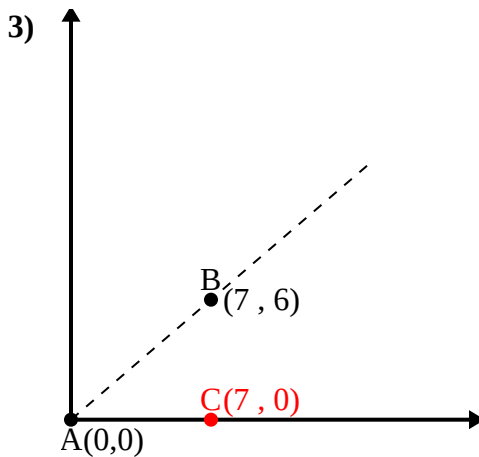
$$\overline{BC} \text{ length} = 6$$

$$(52 + 16 + 36) \div (2 \times 7.21 \times 4)$$

$$0.55$$

$$\cos^{-1}(0.55)$$

$$56.31^\circ$$



$$\overline{AB} \text{ length} = 9.22$$

$$\overline{AC} \text{ length} = 7$$

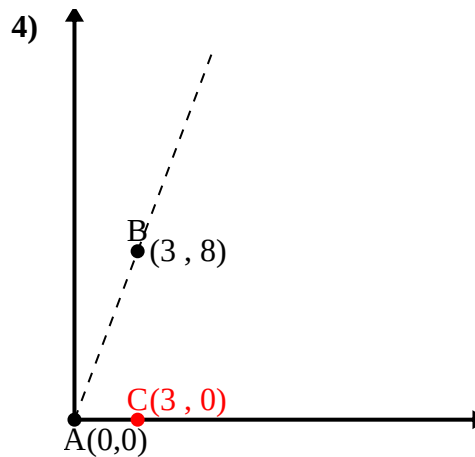
$$\overline{BC} \text{ length} = 6$$

$$(85 + 49 + 36) \div (2 \times 9.22 \times 7)$$

$$0.76$$

$$\cos^{-1}(0.76)$$

$$40.6^\circ$$



$$\overline{AB} \text{ length} = 8.54$$

$$\overline{AC} \text{ length} = 3$$

$$\overline{BC} \text{ length} = 8$$

$$(73 + 9 + 64) \div (2 \times 8.54 \times 3)$$

$$0.35$$

$$\cos^{-1}(0.35)$$

$$69.44^\circ$$

1. 33.69°
2. 56.31°
3. 40.6°
4. 69.44°