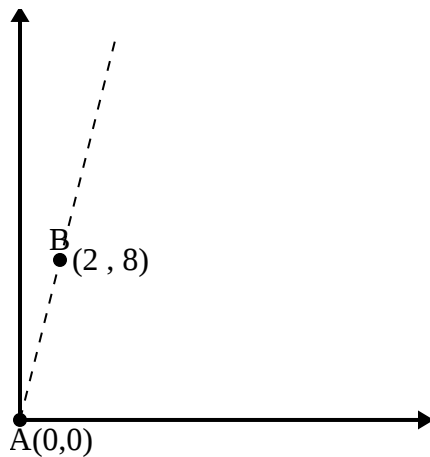




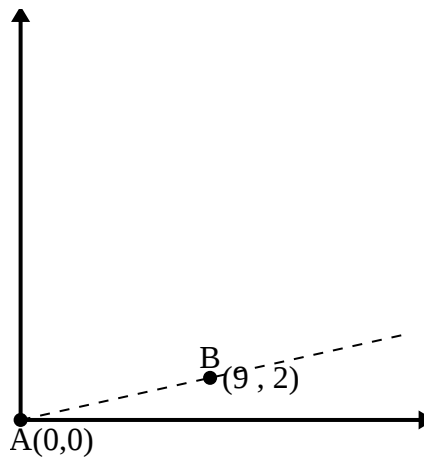
Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



2)



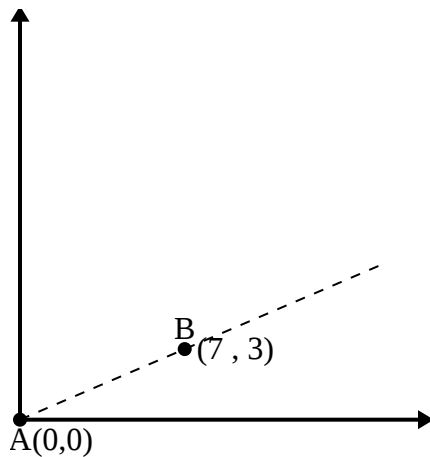
1. _____

2. _____

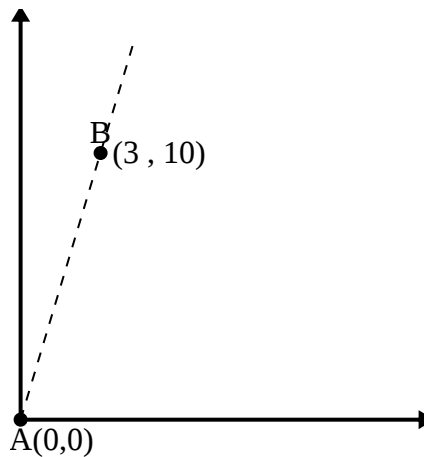
3. _____

4. _____

3)

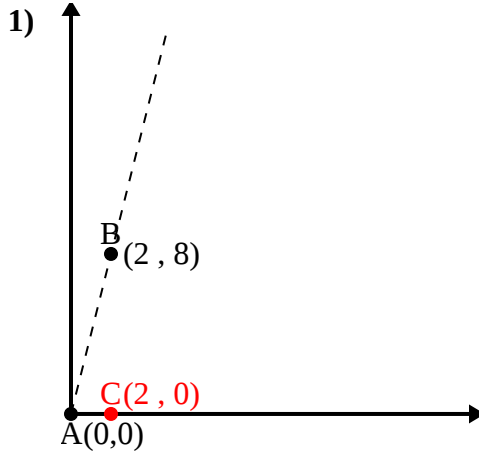


4)





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

Answers

$$\overline{AB} \text{ length} = 8.25$$

$$\overline{AC} \text{ length} = 2$$

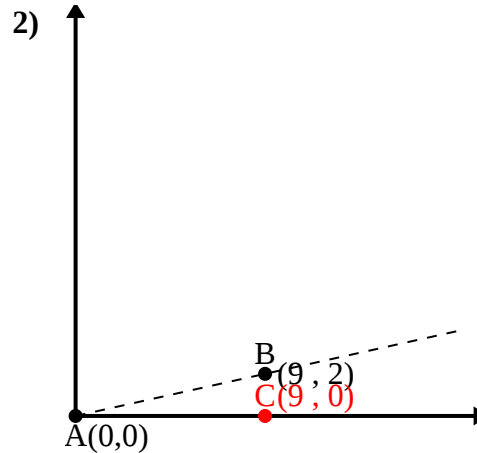
$$\overline{BC} \text{ length} = 8$$

$$(68 + 4 + 64) \div (2 \times 8.25 \times 2)$$

$$0.24$$

$$\cos^{-1}(0.24)$$

$$75.96^\circ$$



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

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

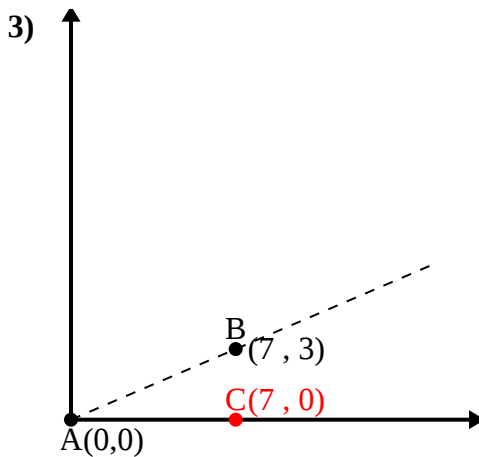
$$\overline{BC} \text{ length} = 2$$

$$(85 + 81 + 4) \div (2 \times 9.22 \times 9)$$

$$0.98$$

$$\cos^{-1}(0.98)$$

$$12.53^\circ$$



$$\overline{AB} \text{ length} = 7.62$$

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

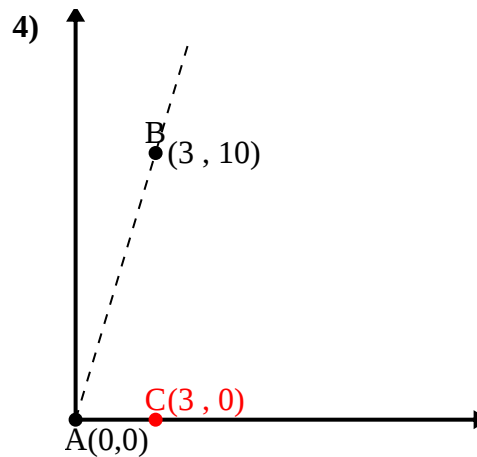
$$\overline{BC} \text{ length} = 3$$

$$(58 + 49 + 9) \div (2 \times 7.62 \times 7)$$

$$0.92$$

$$\cos^{-1}(0.92)$$

$$23.2^\circ$$



$$\overline{AB} \text{ length} = 10.44$$

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

$$\overline{BC} \text{ length} = 10$$

$$(109 + 9 + 100) \div (2 \times 10.44 \times 3)$$

$$0.29$$

$$\cos^{-1}(0.29)$$

$$73.3^\circ$$

1. **75.96°**
2. **12.53°**
3. **23.2°**
4. **73.3°**