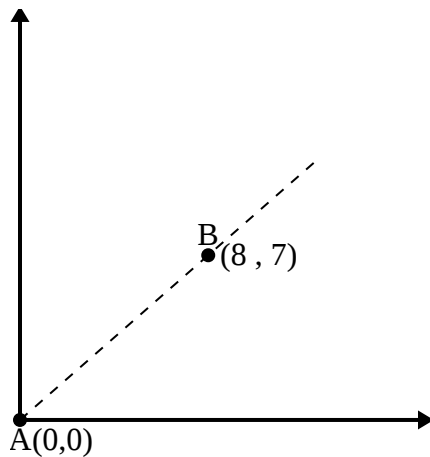




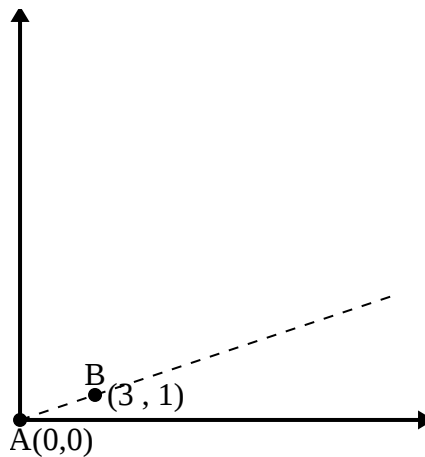
Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



2)



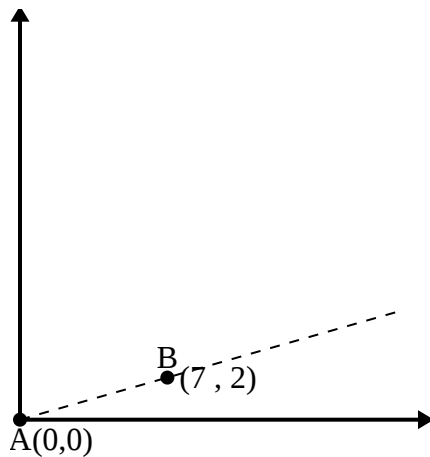
1. _____

2. _____

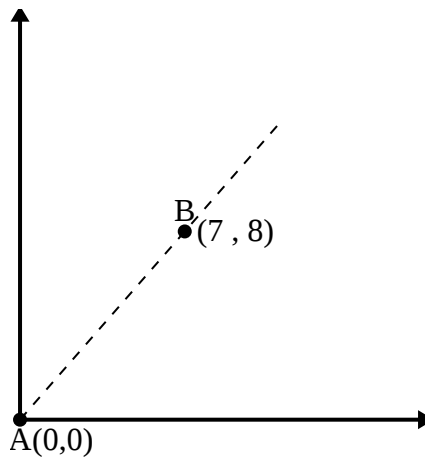
3. _____

4. _____

3)

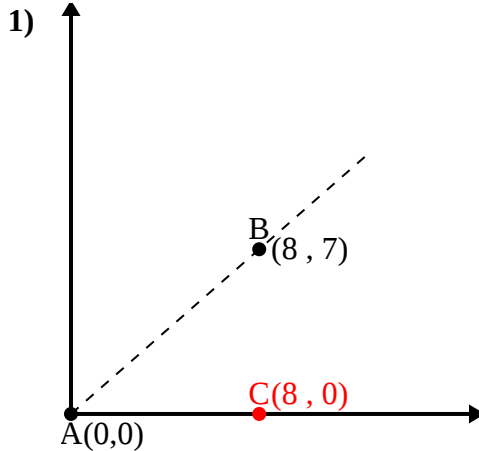


4)





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

Answers

$$\overline{AB} \text{ length} = 10.63$$

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

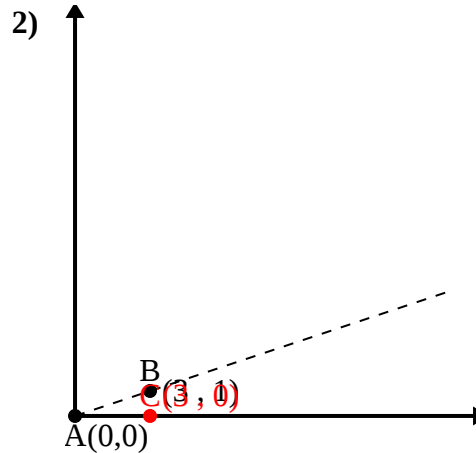
$$\overline{BC} \text{ length} = 7$$

$$(113 + 64 + 49) \div (2 \times 10.63 \times 8)$$

$$0.75$$

$$\cos^{-1}(0.75)$$

$$41.19^\circ$$



$$\overline{AB} \text{ length} = 3.16$$

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

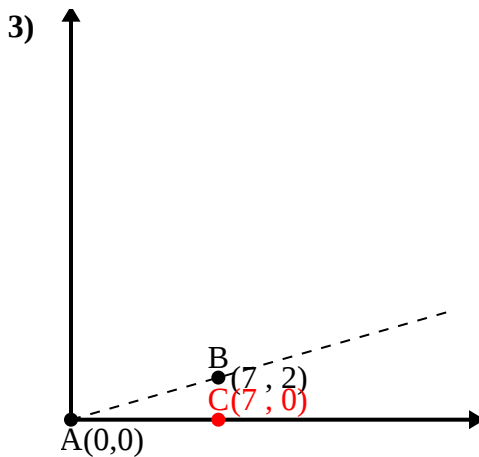
$$\overline{BC} \text{ length} = 1$$

$$(10 + 9 + 1) \div (2 \times 3.16 \times 3)$$

$$0.95$$

$$\cos^{-1}(0.95)$$

$$18.43^\circ$$



$$\overline{AB} \text{ length} = 7.28$$

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

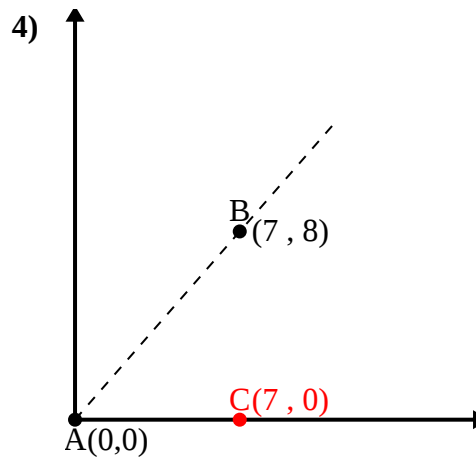
$$\overline{BC} \text{ length} = 2$$

$$(53 + 49 + 4) \div (2 \times 7.28 \times 7)$$

$$0.96$$

$$\cos^{-1}(0.96)$$

$$15.95^\circ$$



$$\overline{AB} \text{ length} = 10.63$$

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

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

$$(113 + 49 + 64) \div (2 \times 10.63 \times 7)$$

$$0.66$$

$$\cos^{-1}(0.66)$$

$$48.81^\circ$$

1. **41.19°**
2. **18.43°**
3. **15.95°**
4. **48.81°**