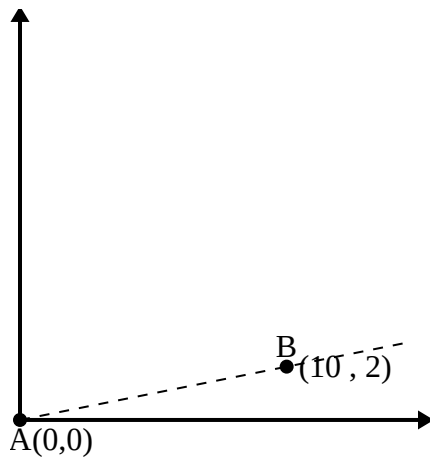




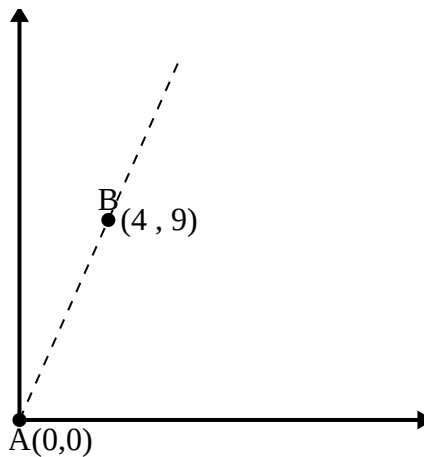
Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



2)



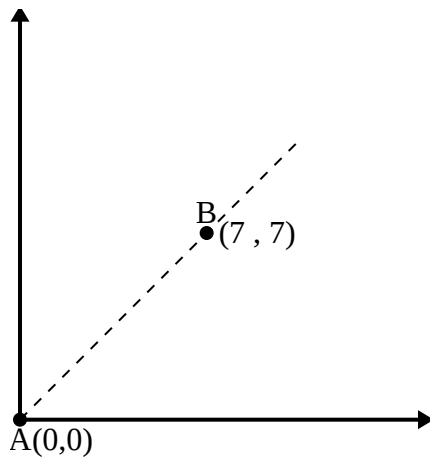
1. _____

2. _____

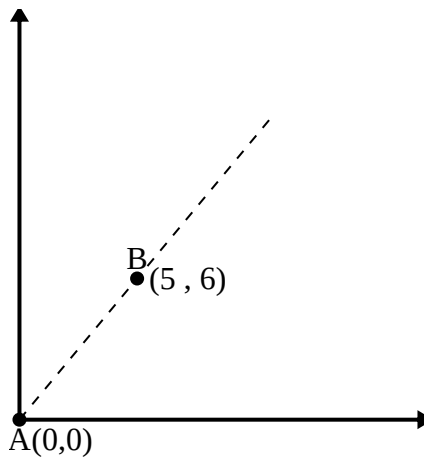
3. _____

4. _____

3)



4)

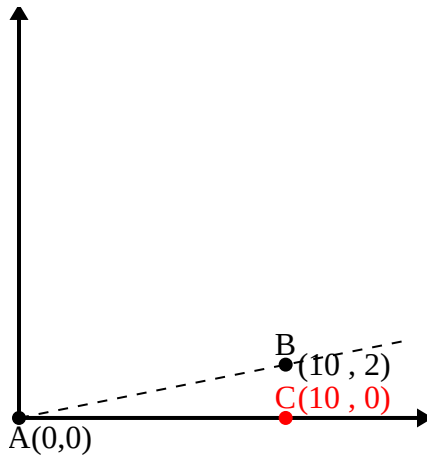




Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



$$\overline{AB} \text{ length} = 10.2$$

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

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

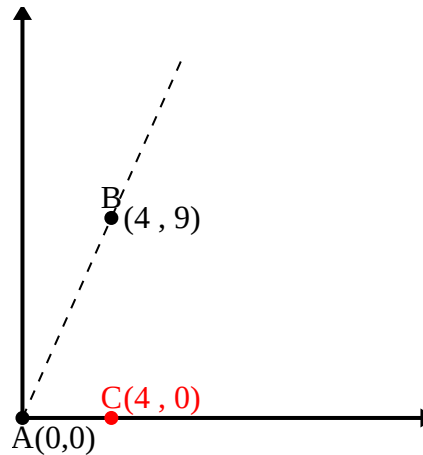
$$(104 + 100 + 4) \div (2 \times 10.2 \times 10)$$

$$0.98$$

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

$$11.31^\circ$$

2)



$$\overline{AB} \text{ length} = 9.85$$

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

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

$$(97 + 16 + 81) \div (2 \times 9.85 \times 4)$$

$$0.41$$

$$\cos^{-1}(0.41)$$

$$66.04^\circ$$

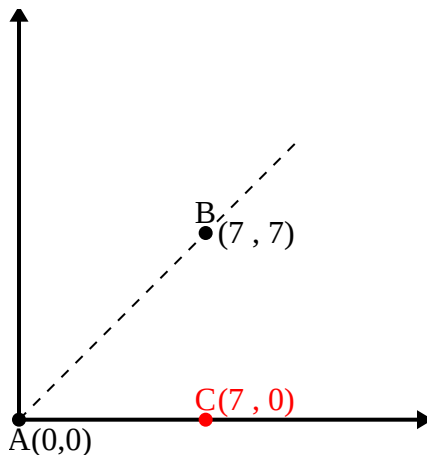
1. 11.31°

2. 66.04°

3. 45°

4. 50.19°

3)



$$\overline{AB} \text{ length} = 9.9$$

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

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

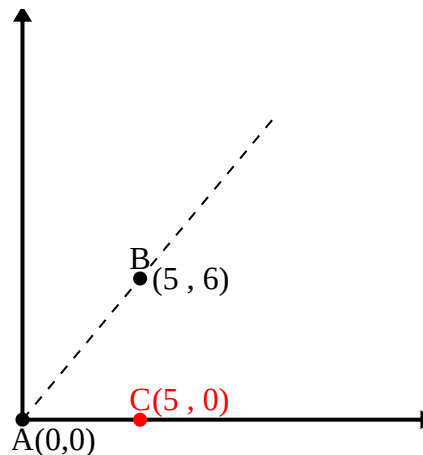
$$(98 + 49 + 49) \div (2 \times 9.9 \times 7)$$

$$0.71$$

$$\cos^{-1}(0.71)$$

$$45^\circ$$

4)



$$\overline{AB} \text{ length} = 7.81$$

$$\overline{AC} \text{ length} = 5$$

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

$$(61 + 25 + 36) \div (2 \times 7.81 \times 5)$$

$$0.64$$

$$\cos^{-1}(0.64)$$

$$50.19^\circ$$