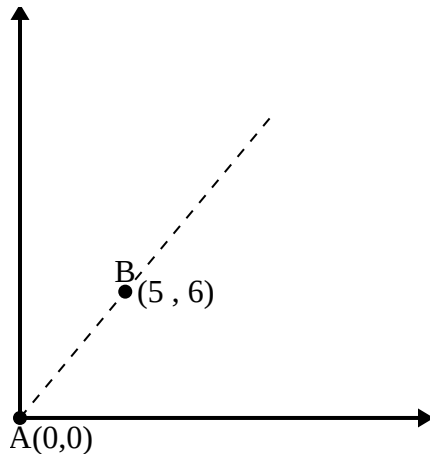




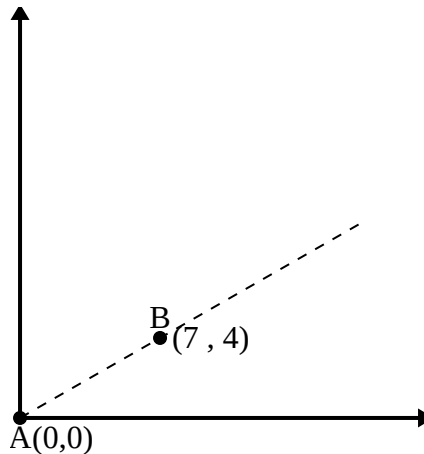
Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



2)



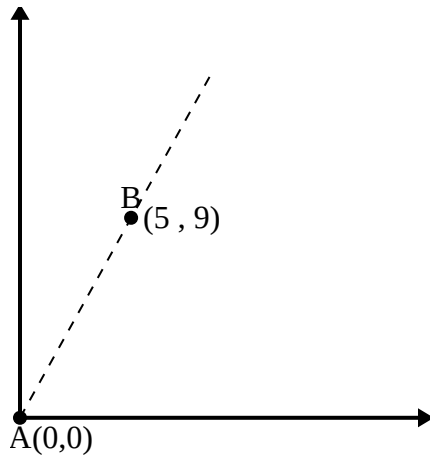
1. _____

2. _____

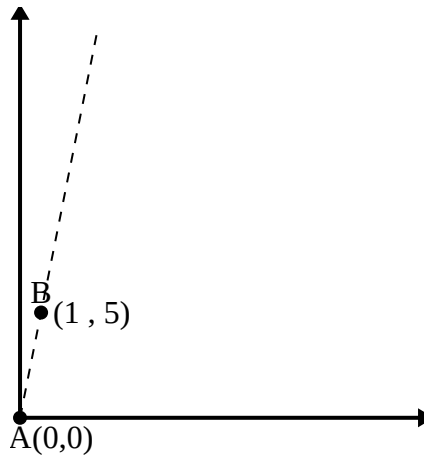
3. _____

4. _____

3)



4)

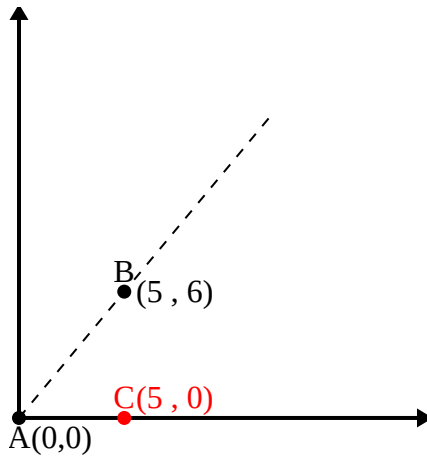




Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



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

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

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

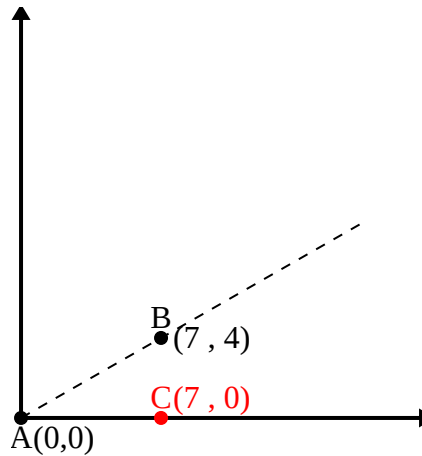
$$(61 + 25 + 36) \div (2 \times 7.81 \times 5)$$

$$0.64$$

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

$$50.19^\circ$$

2)



$$\overline{AB} \text{ length} = 8.06$$

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

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

$$(65 + 49 + 16) \div (2 \times 8.06 \times 7)$$

$$0.87$$

$$\cos^{-1}(0.87)$$

$$29.74^\circ$$

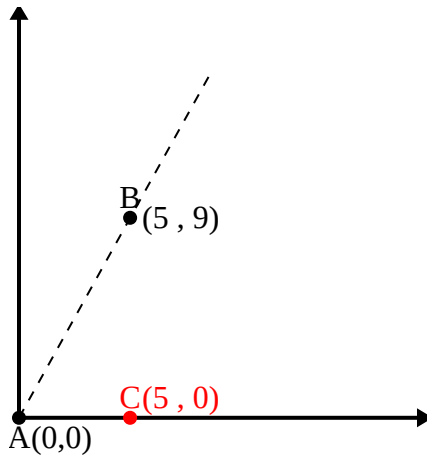
1. 50.19°

2. 29.74°

3. 60.95°

4. 78.69°

3)



$$\overline{AB} \text{ length} = 10.3$$

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

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

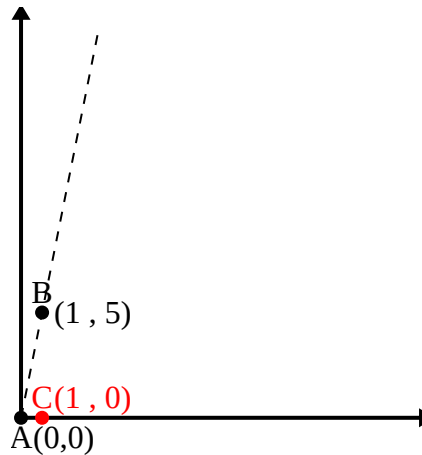
$$(106 + 25 + 81) \div (2 \times 10.3 \times 5)$$

$$0.49$$

$$\cos^{-1}(0.49)$$

$$60.95^\circ$$

4)



$$\overline{AB} \text{ length} = 5.1$$

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

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

$$(26 + 1 + 25) \div (2 \times 5.1 \times 1)$$

$$0.2$$

$$\cos^{-1}(0.2)$$

$$78.69^\circ$$