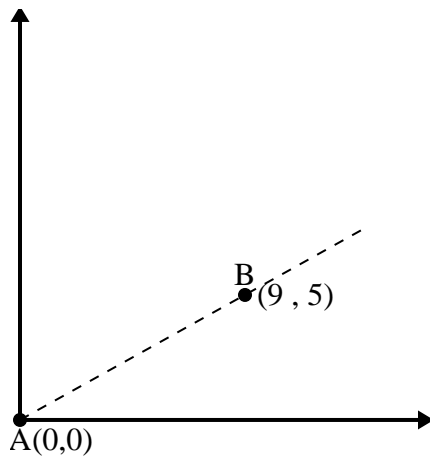




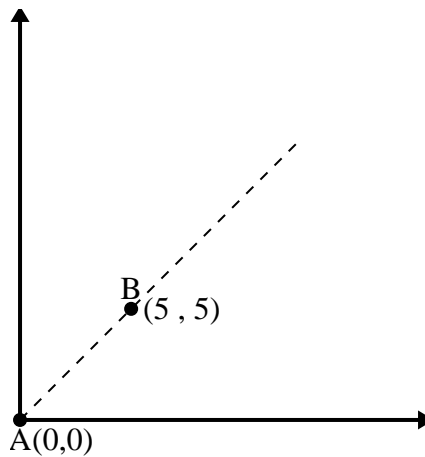
Use the law of Cosines to find the point B's angle relative to point A.

**Answers**

1)



2)



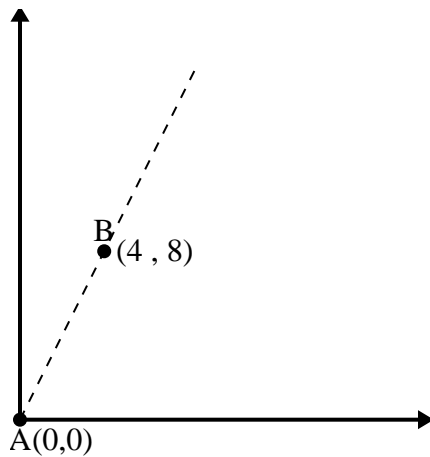
1. \_\_\_\_\_

2. \_\_\_\_\_

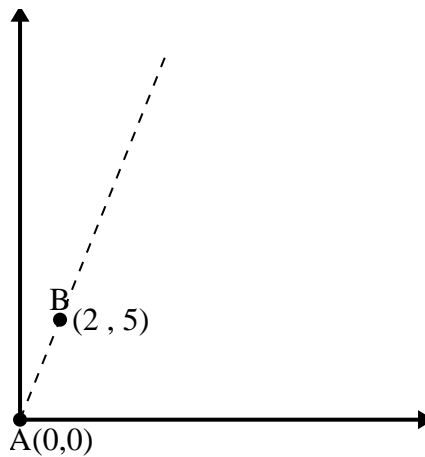
3. \_\_\_\_\_

4. \_\_\_\_\_

3)

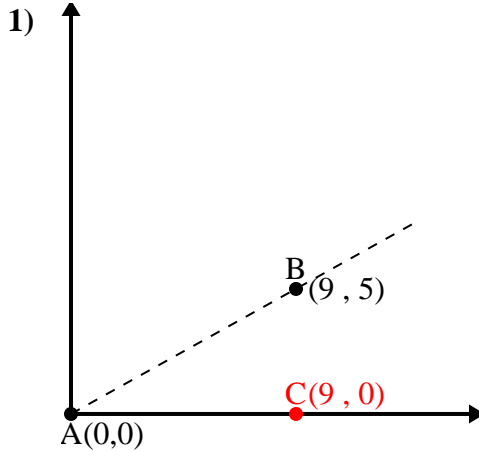


4)





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

**Answers**

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

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

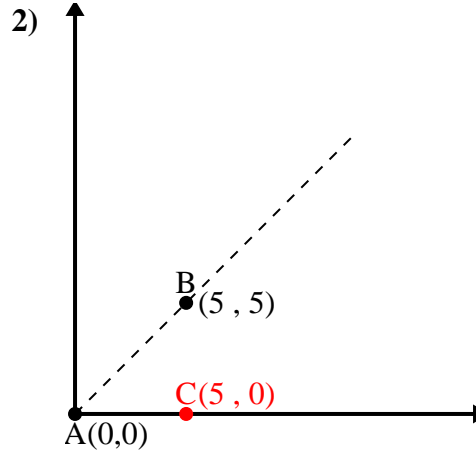
$$\overline{BC} \text{ length} = 5$$

$$(106 + 81 + 25) \div (2 \times 10.3 \times 9)$$

$$0.87$$

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

$$29.05^\circ$$



$$\overline{AB} \text{ length} = 7.07$$

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

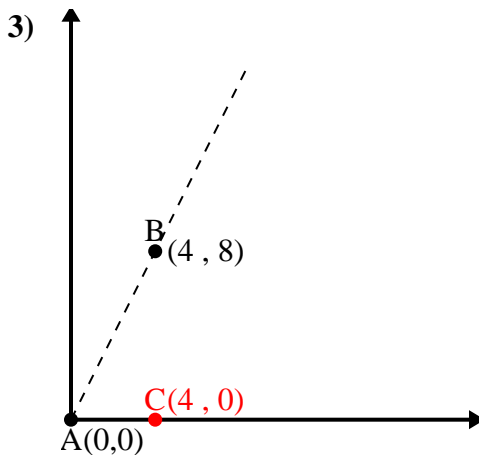
$$\overline{BC} \text{ length} = 5$$

$$(50 + 25 + 25) \div (2 \times 7.07 \times 5)$$

$$0.71$$

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

$$45^\circ$$



$$\overline{AB} \text{ length} = 8.94$$

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

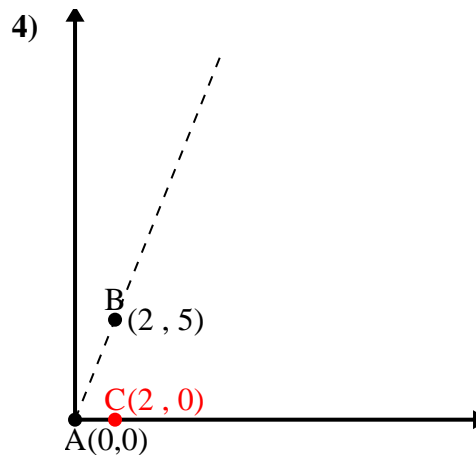
$$\overline{BC} \text{ length} = 8$$

$$(80 + 16 + 64) \div (2 \times 8.94 \times 4)$$

$$0.45$$

$$\cos^{-1}(0.45)$$

$$63.43^\circ$$



$$\overline{AB} \text{ length} = 5.39$$

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

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

$$(29 + 4 + 25) \div (2 \times 5.39 \times 2)$$

$$0.37$$

$$\cos^{-1}(0.37)$$

$$68.2^\circ$$

1.  $29.05^\circ$

2.  $45^\circ$

3.  $63.43^\circ$

4.  $68.2^\circ$