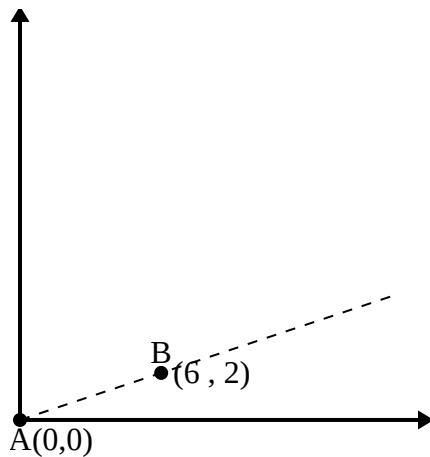




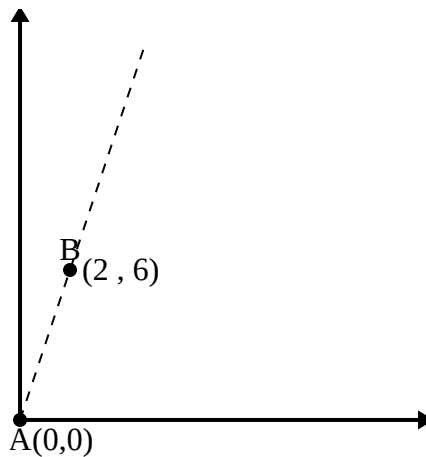
Use the law of Cosines to find the point B's angle relative to point A.

Answers

1)



2)



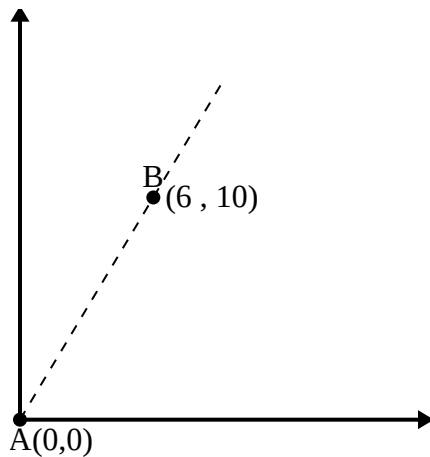
1. _____

2. _____

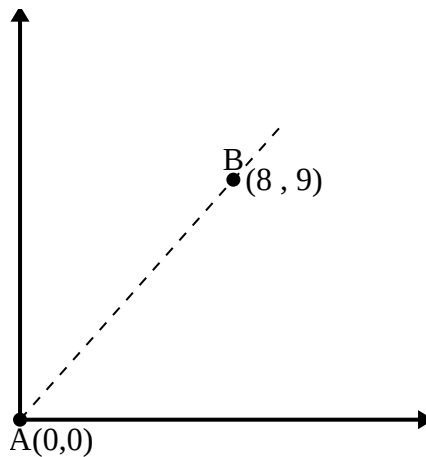
3. _____

4. _____

3)

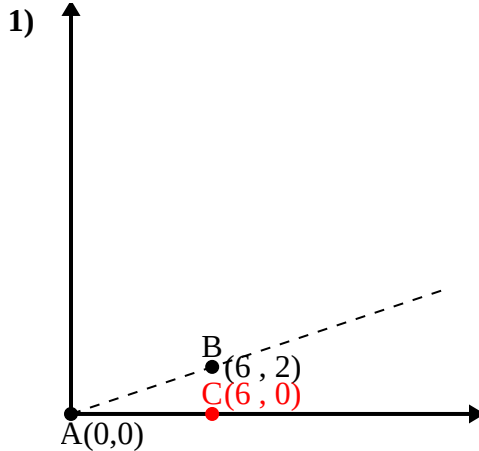


4)





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

Answers

$$\overline{AB} \text{ length} = 6.32$$

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

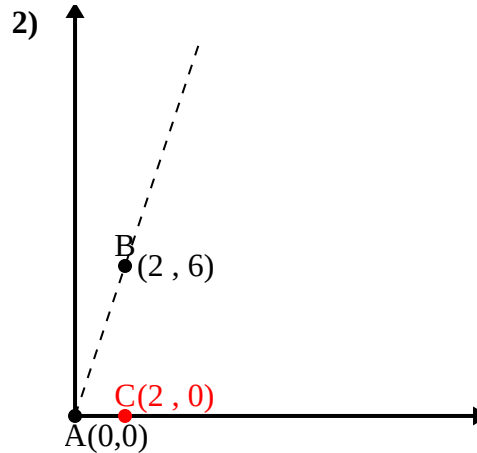
$$\overline{BC} \text{ length} = 2$$

$$(40 + 36 + 4) \div (2 \times 6.32 \times 6)$$

$$0.95$$

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

$$18.43^\circ$$



$$\overline{AB} \text{ length} = 6.32$$

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

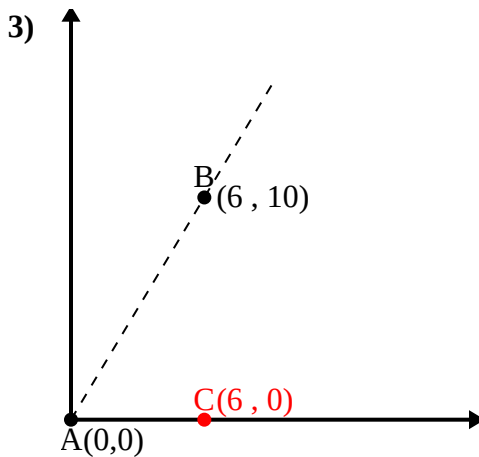
$$\overline{BC} \text{ length} = 6$$

$$(40 + 4 + 36) \div (2 \times 6.32 \times 2)$$

$$0.32$$

$$\cos^{-1}(0.32)$$

$$71.57^\circ$$



$$\overline{AB} \text{ length} = 11.66$$

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

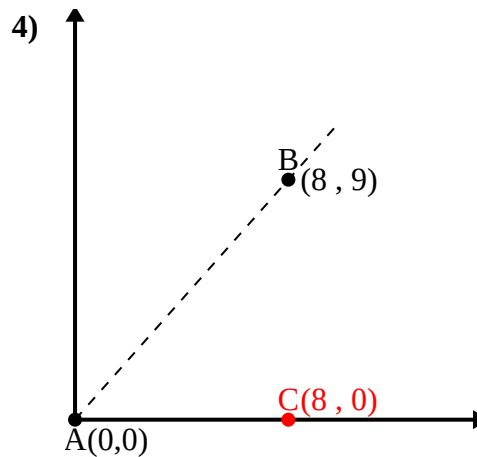
$$\overline{BC} \text{ length} = 10$$

$$(136 + 36 + 100) \div (2 \times 11.66 \times 6)$$

$$0.51$$

$$\cos^{-1}(0.51)$$

$$59.04^\circ$$



$$\overline{AB} \text{ length} = 12.04$$

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

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

$$(145 + 64 + 81) \div (2 \times 12.04 \times 8)$$

$$0.66$$

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

$$48.37^\circ$$

1. **18.43°**
2. **71.57°**
3. **59.04°**
4. **48.37°**