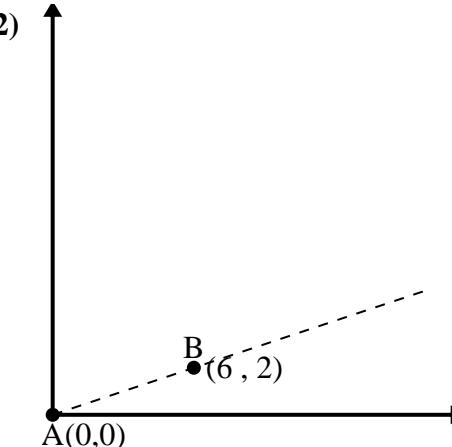
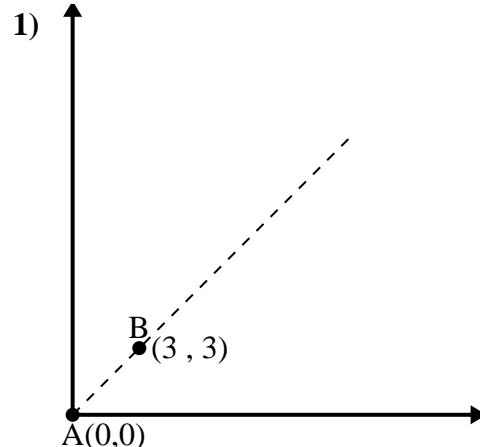
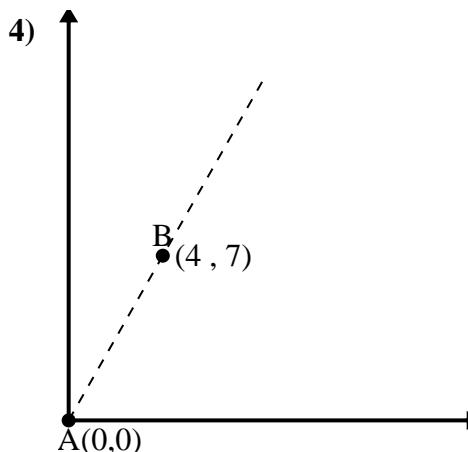
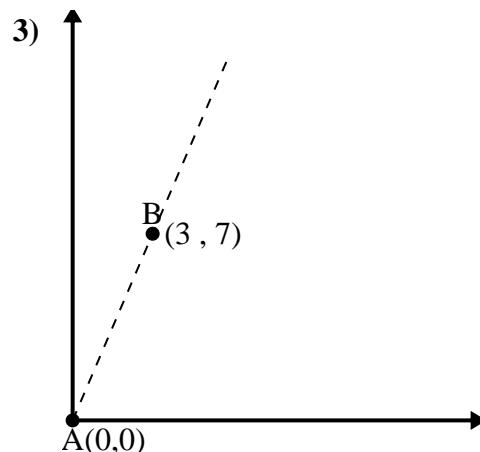


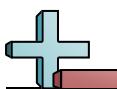


Use the law of Cosines to find the point B's angle relative to point A.

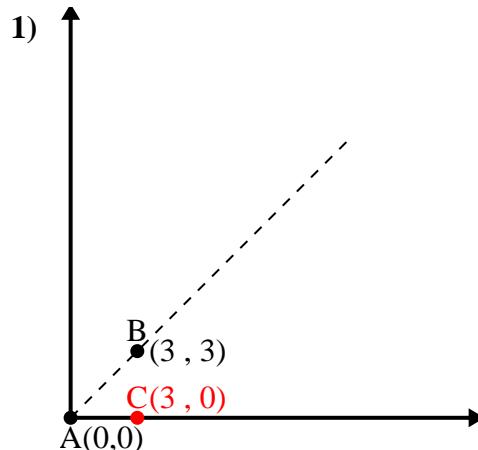
**Answers**

1. _____
2. _____
3. _____
4. _____





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



$$\overline{AB} \text{ length} = 4.24$$

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

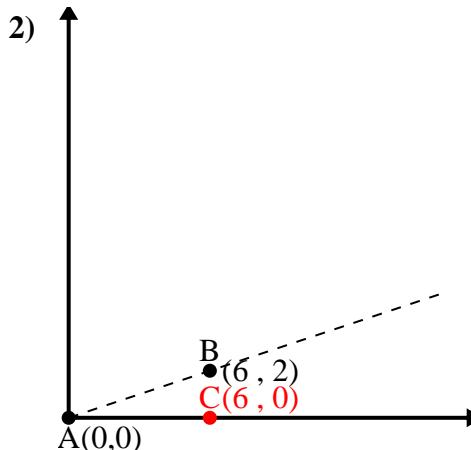
$$\overline{BC} \text{ length} = 3$$

$$(18 + 9 + 9) \div (2 \times 4.24 \times 3)$$

$$0.71$$

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

$$45^\circ$$



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

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

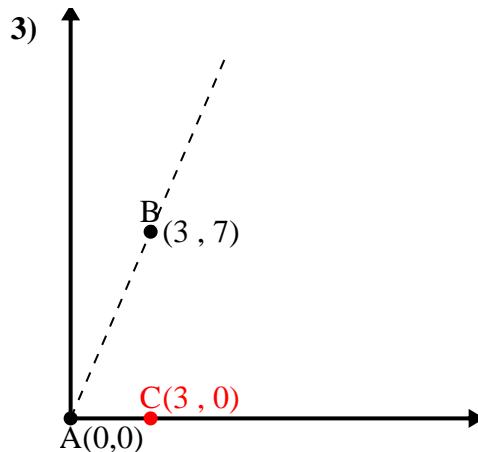
$$\overline{BC} \text{ length} = 2$$

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

$$0.95$$

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

$$18.43^\circ$$



$$\overline{AB} \text{ length} = 7.62$$

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

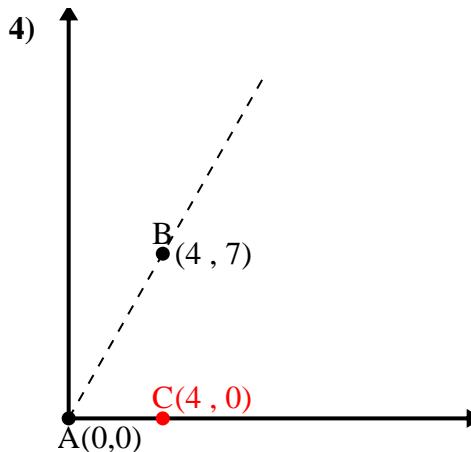
$$\overline{BC} \text{ length} = 7$$

$$(58 + 9 + 49) \div (2 \times 7.62 \times 3)$$

$$0.39$$

$$\cos^{-1}(0.39)$$

$$66.8^\circ$$



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

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

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

$$(65 + 16 + 49) \div (2 \times 8.06 \times 4)$$

$$0.5$$

$$\cos^{-1}(0.5)$$

$$60.26^\circ$$

Answers

1. **45°**

2. **18.43°**

3. **66.8°**

4. **60.26°**