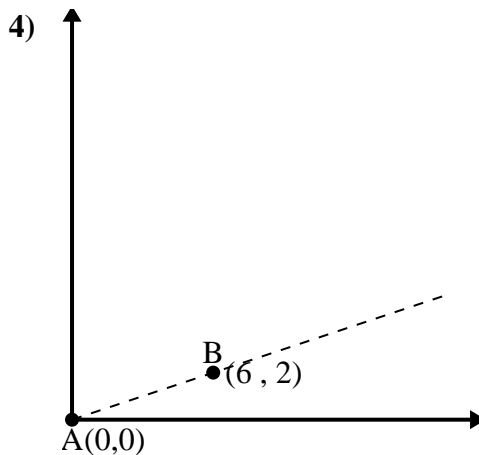
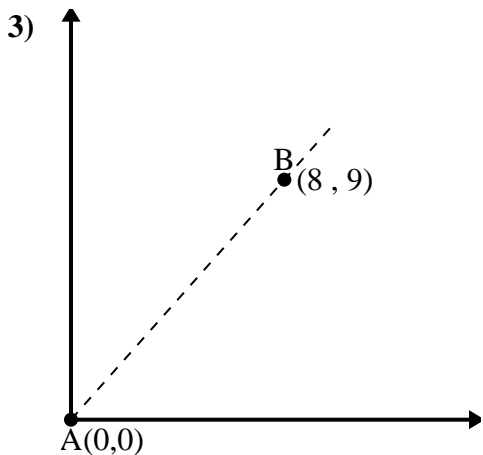
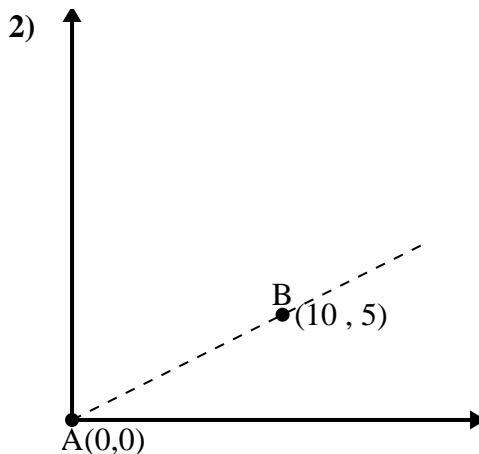
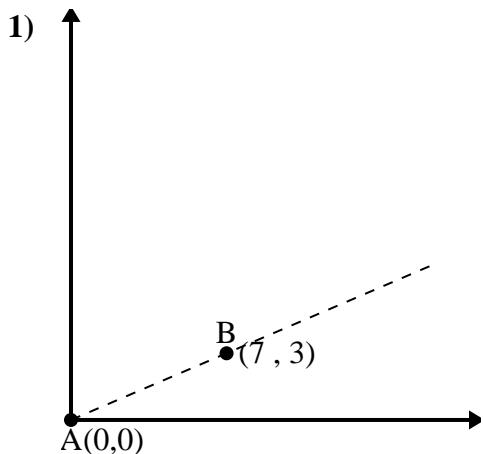




Use the law of Cosines to find the point B's angle relative to point A.

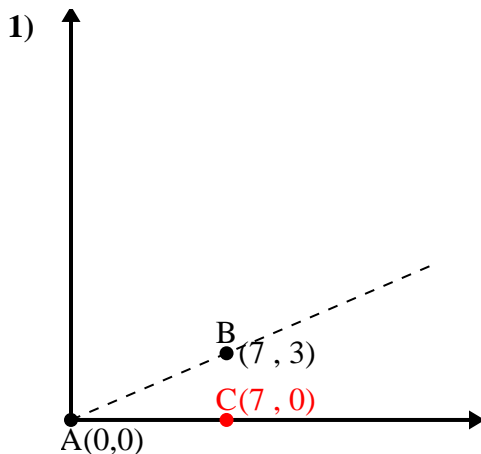
Answers



- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_



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

Answers

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

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

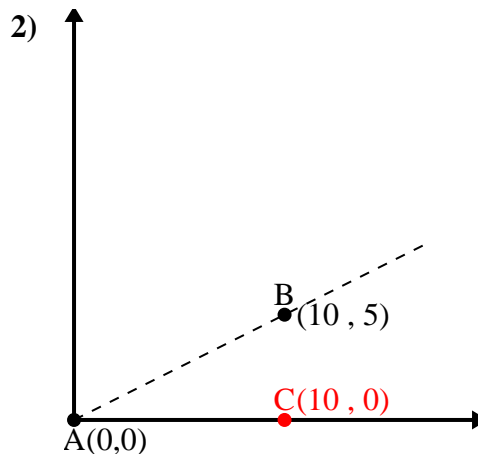
$$\overline{BC} \text{ length} = 3$$

$$(58 + 49 + 9) \div (2 \times 7.62 \times 7)$$

$$0.92$$

$$\cos^{-1}(0.92)$$

$$23.2^\circ$$



$$\overline{AB} \text{ length} = 11.18$$

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

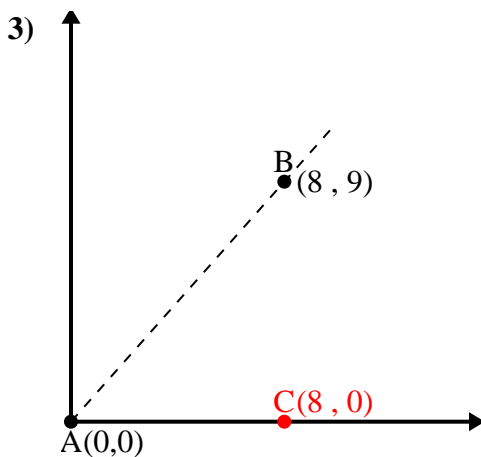
$$\overline{BC} \text{ length} = 5$$

$$(125 + 100 + 25) \div (2 \times 11.18 \times 10)$$

$$0.89$$

$$\cos^{-1}(0.89)$$

$$26.57^\circ$$



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

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

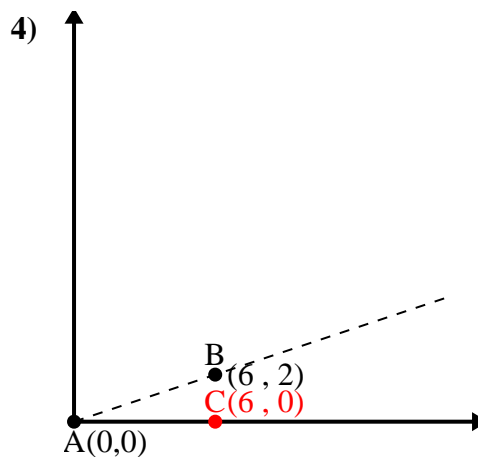
$$\overline{BC} \text{ length} = 9$$

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

$$0.66$$

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

$$48.37^\circ$$



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

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

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

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

$$0.95$$

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

$$18.43^\circ$$

1. 23.2°

2. 26.57°

3. 48.37°

4. 18.43°