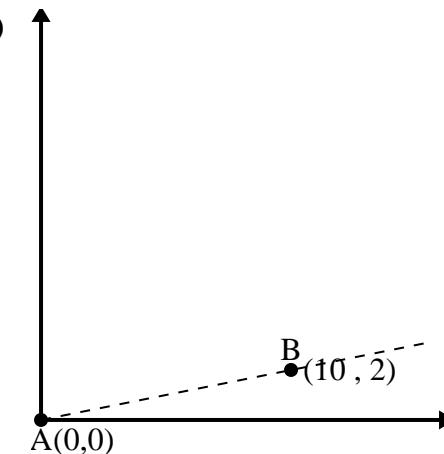
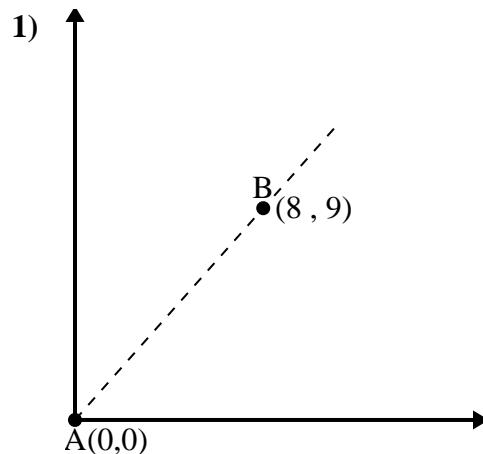




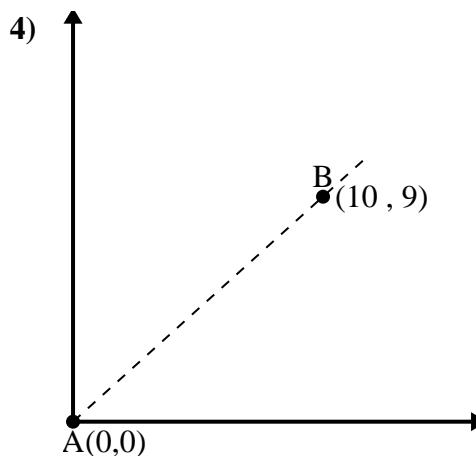
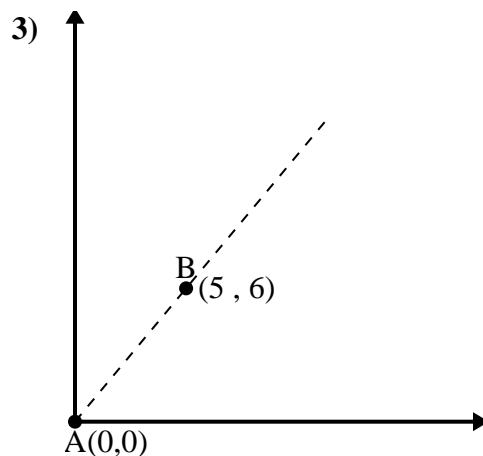
Applying the Law of Cosines

Name: _____

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

Answers

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

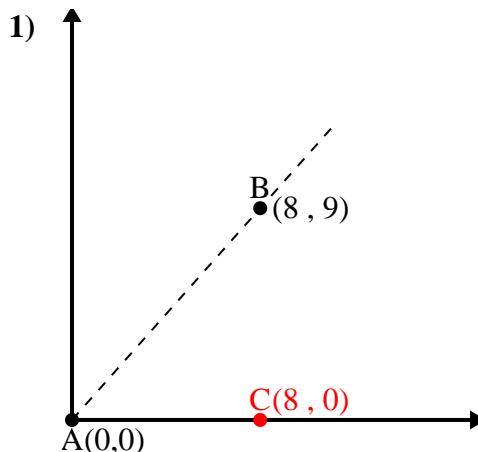




Applying the Law of Cosines

Name: **Answer Key**

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

Answers

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

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

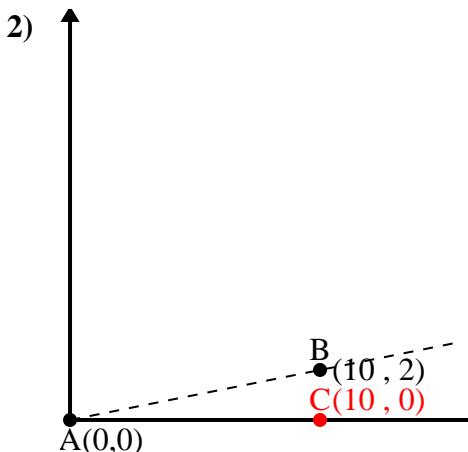
$$\overline{BC} \text{ length} = 9$$

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

$$0.66$$

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

$$48.37^\circ$$



$$\overline{AB} \text{ length} = 10.2$$

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

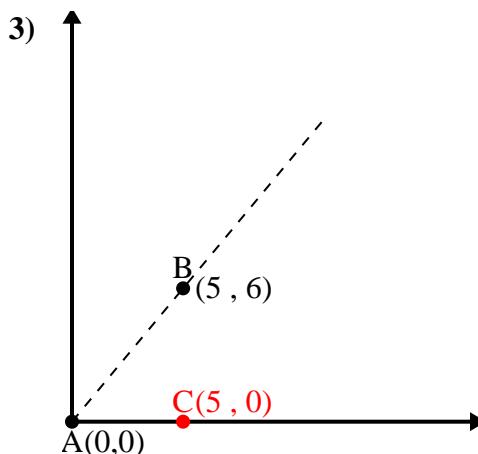
$$\overline{BC} \text{ length} = 2$$

$$(104 + 100 + 4) \div (2 \times 10.2 \times 10)$$

$$0.98$$

$$\cos^{-1}(0.98)$$

$$11.31^\circ$$



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

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

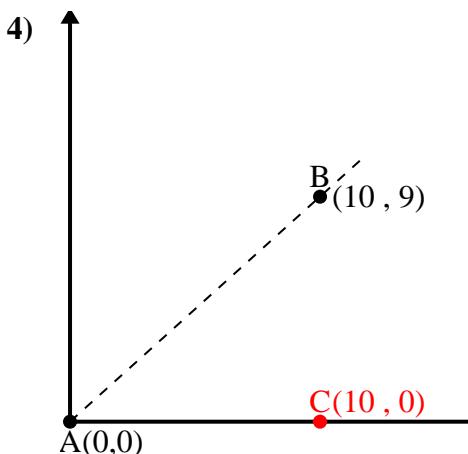
$$\overline{BC} \text{ length} = 6$$

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

$$0.64$$

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

$$50.19^\circ$$



$$\overline{AB} \text{ length} = 13.45$$

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

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

$$(181 + 100 + 81) \div (2 \times 13.45 \times 10)$$

$$0.74$$

$$\cos^{-1}(0.74)$$

$$41.99^\circ$$

- | | |
|----|--------|
| 1. | 48.37° |
| 2. | 11.31° |
| 3. | 50.19° |
| 4. | 41.99° |