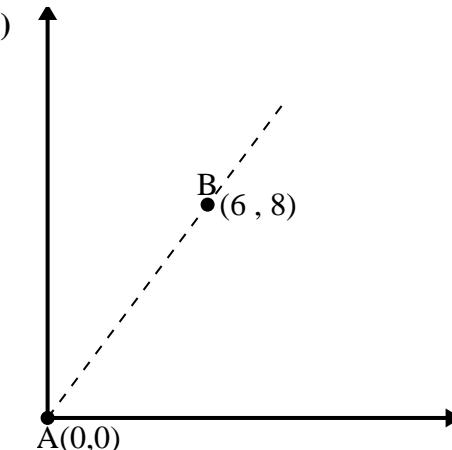
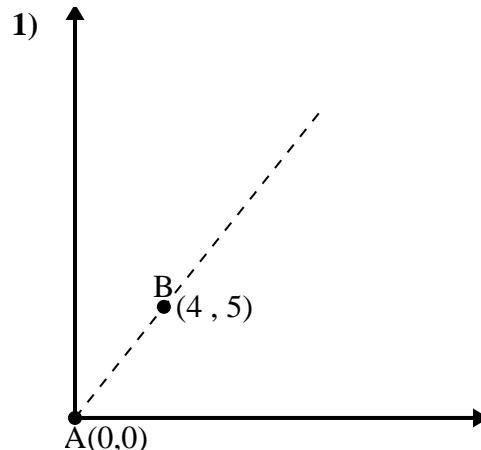


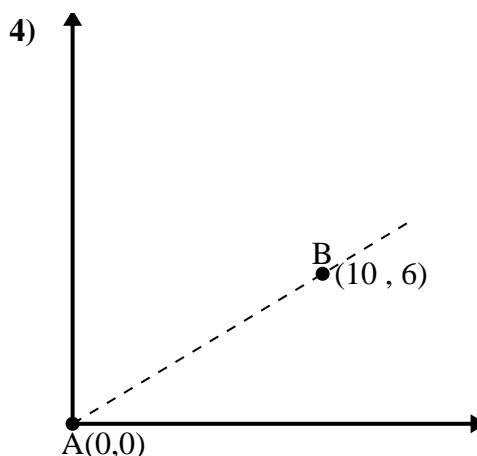
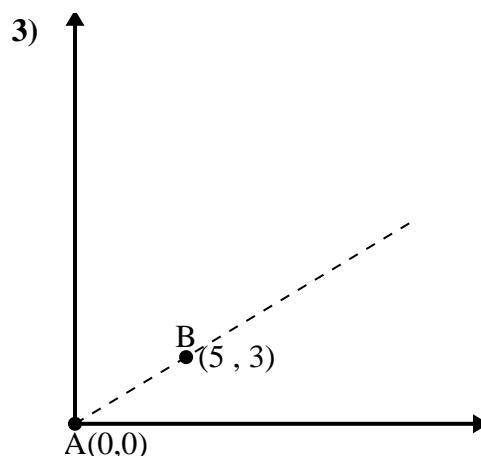
Applying the Law of Cosines

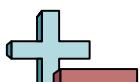
Name: _____

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

Answers

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

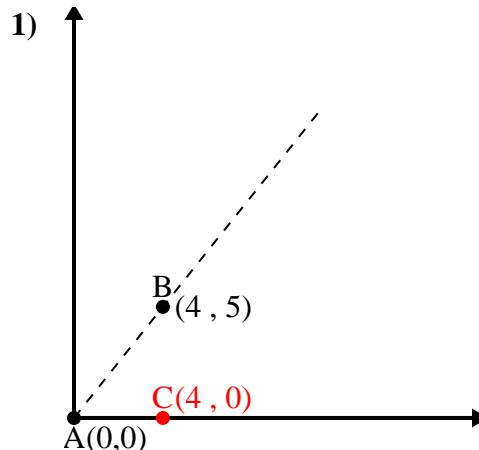




Applying the Law of Cosines

Name: **Answer Key**

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

Answers

$$\overline{AB} \text{ length} = 6.4$$

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

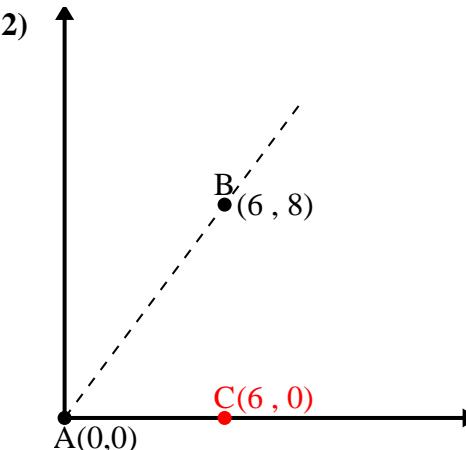
$$\overline{BC} \text{ length} = 5$$

$$(41 + 16 + 25) \div (2 \times 6.4 \times 4)$$

$$0.62$$

$$\cos^{-1}(0.62)$$

$$51.34^\circ$$



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

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

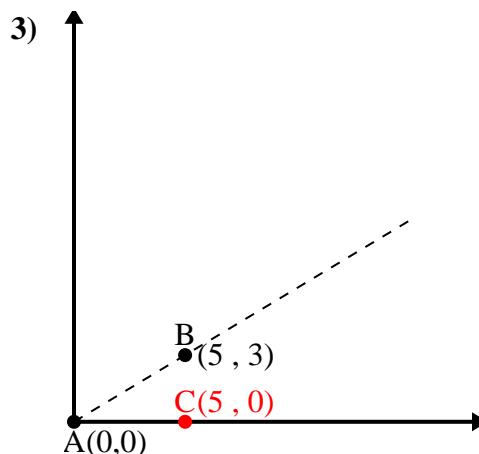
$$\overline{BC} \text{ length} = 8$$

$$(100 + 36 + 64) \div (2 \times 10 \times 6)$$

$$0.6$$

$$\cos^{-1}(0.6)$$

$$53.13^\circ$$



$$\overline{AB} \text{ length} = 5.83$$

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

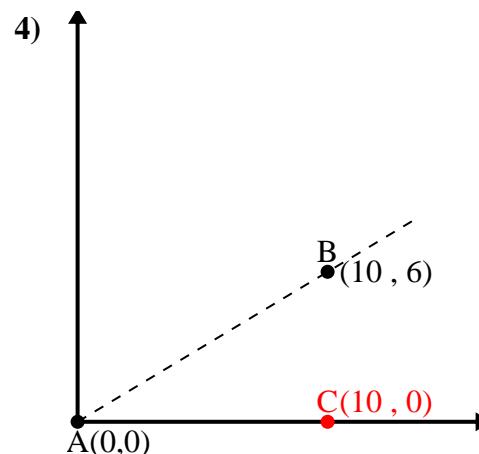
$$\overline{BC} \text{ length} = 3$$

$$(34 + 25 + 9) \div (2 \times 5.83 \times 5)$$

$$0.86$$

$$\cos^{-1}(0.86)$$

$$30.96^\circ$$



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

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

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

$$(136 + 100 + 36) \div (2 \times 11.66 \times 10)$$

$$0.86$$

$$\cos^{-1}(0.86)$$

$$30.96^\circ$$

1. **51.34°**

2. **53.13°**

3. **30.96°**

4. **30.96°**