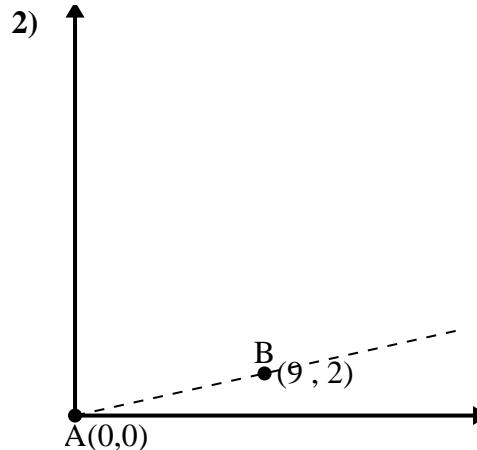
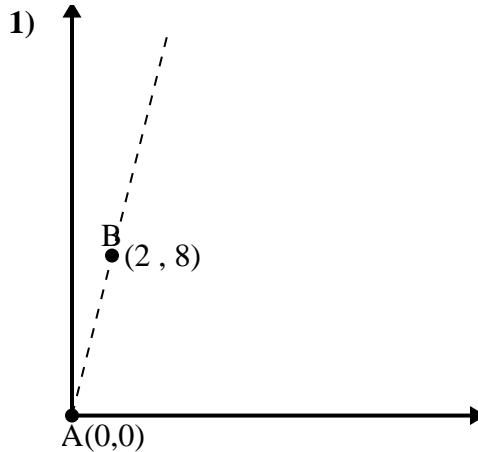


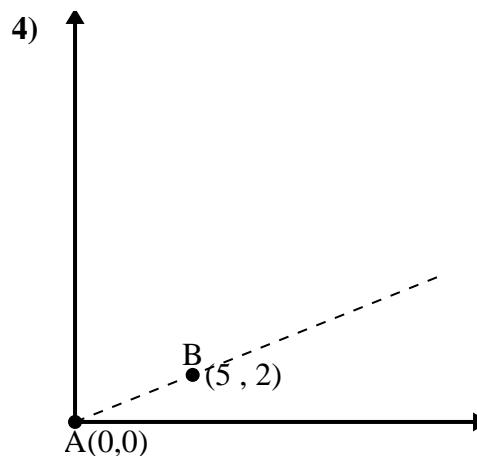
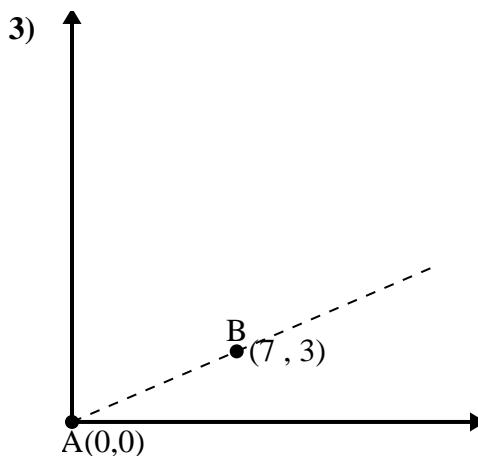
Applying the Law of Cosines

Name: _____

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

Answers

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

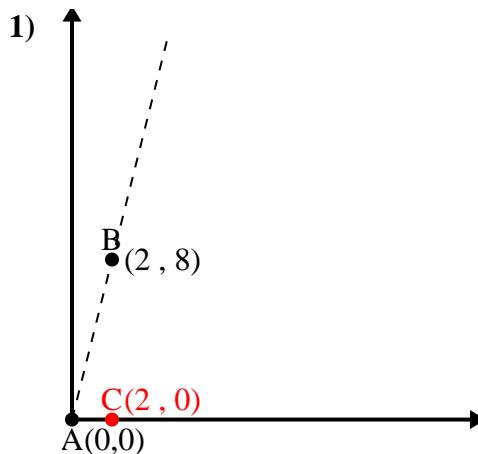




Applying the Law of Cosines

Name: **Answer Key**

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

Answers

$$\overline{AB} \text{ length} = 8.25$$

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

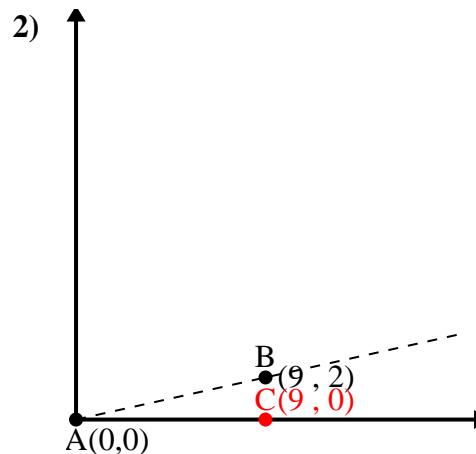
$$\overline{BC} \text{ length} = 8$$

$$(68 + 4 + 64) \div (2 \times 8.25 \times 2)$$

$$0.24$$

$$\cos^{-1}(0.24)$$

$$75.96^\circ$$



$$\overline{AB} \text{ length} = 9.22$$

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

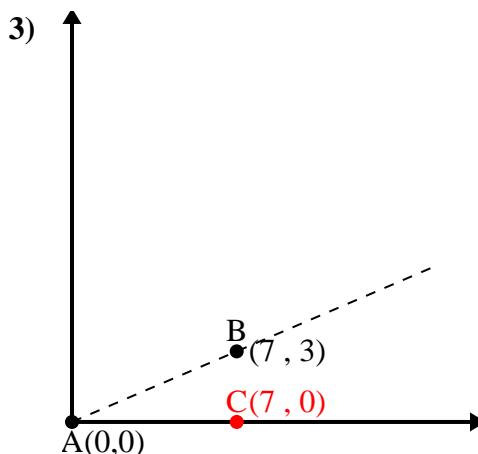
$$\overline{BC} \text{ length} = 2$$

$$(85 + 81 + 4) \div (2 \times 9.22 \times 9)$$

$$0.98$$

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

$$12.53^\circ$$



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

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

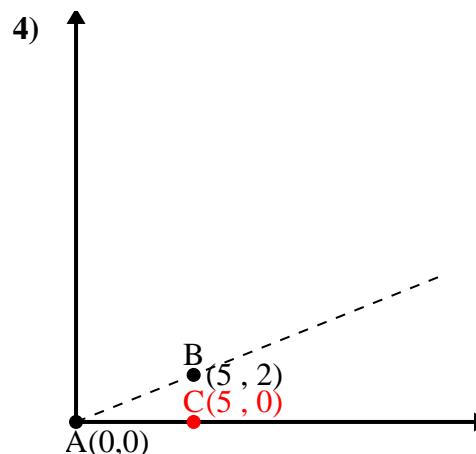
$$\overline{BC} \text{ length} = 3$$

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

$$0.92$$

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

$$23.2^\circ$$



$$\overline{AB} \text{ length} = 5.39$$

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

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

$$(29 + 25 + 4) \div (2 \times 5.39 \times 5)$$

$$0.93$$

$$\cos^{-1}(0.93)$$

$$21.8^\circ$$

1. **75.96°**

2. **12.53°**

3. **23.2°**

4. **21.8°**