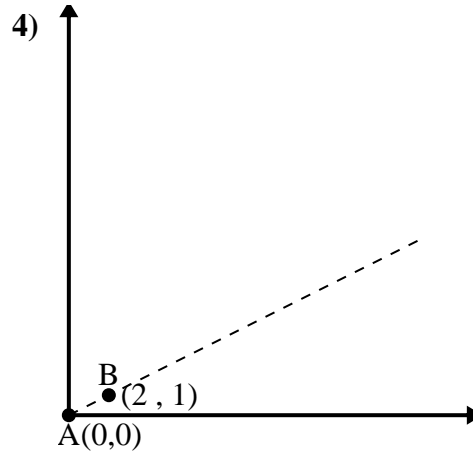
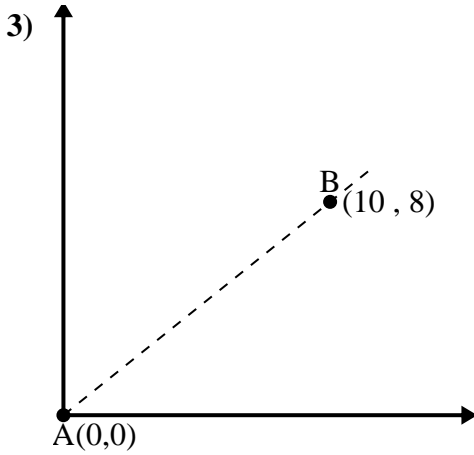
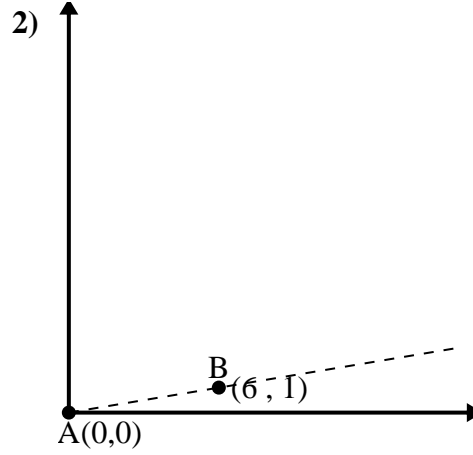
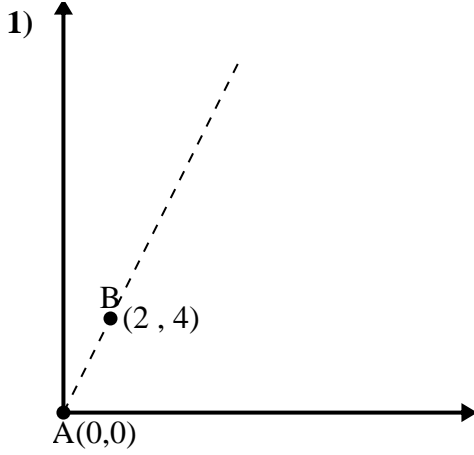




Use the law of Cosines to find the point B's angle relative to point A.



Answers

1. \_\_\_\_\_

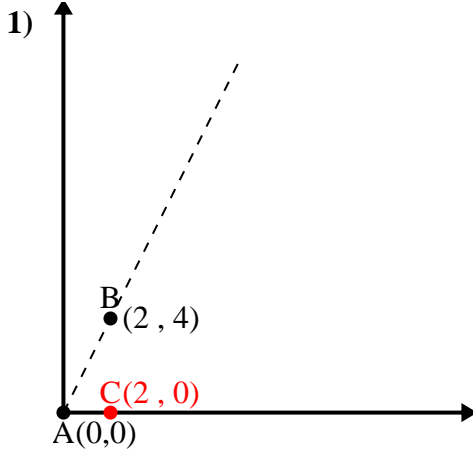
2. \_\_\_\_\_

3. \_\_\_\_\_

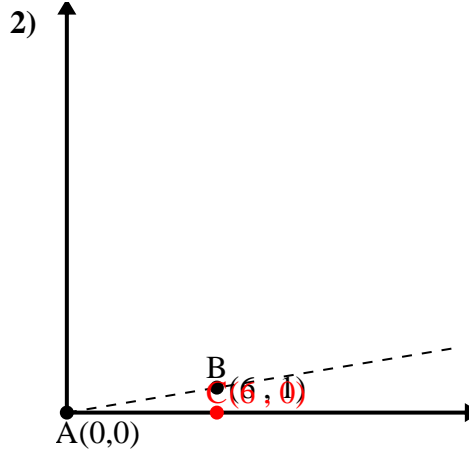
4. \_\_\_\_\_



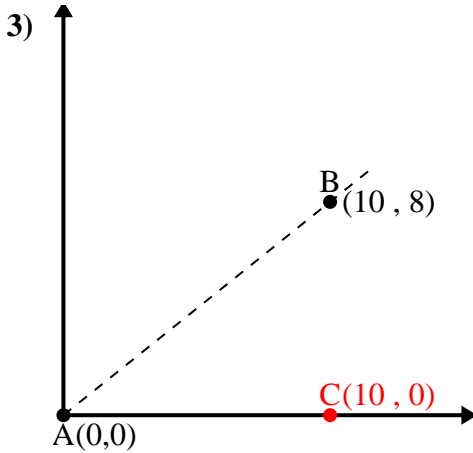
Use the law of Cosines to find the point B's angle relative to point A.



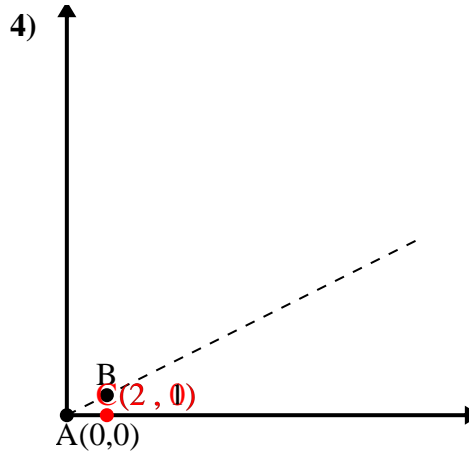
$\overline{AB}$  length = 4.47  
 $\overline{AC}$  length = 2  
 $\overline{BC}$  length = 4  
 $(20 + 4 + 16) \div (2 \times 4.47 \times 2)$   
 0.45  
 $\cos^{-1}(0.45)$   
 $63.43^\circ$



$\overline{AB}$  length = 6.08  
 $\overline{AC}$  length = 6  
 $\overline{BC}$  length = 1  
 $(37 + 36 + 1) \div (2 \times 6.08 \times 6)$   
 0.99  
 $\cos^{-1}(0.99)$   
 $9.46^\circ$



$\overline{AB}$  length = 12.81  
 $\overline{AC}$  length = 10  
 $\overline{BC}$  length = 8  
 $(164 + 100 + 64) \div (2 \times 12.81 \times 10)$   
 0.78  
 $\cos^{-1}(0.78)$   
 $38.66^\circ$



$\overline{AB}$  length = 2.24  
 $\overline{AC}$  length = 2  
 $\overline{BC}$  length = 1  
 $(5 + 4 + 1) \div (2 \times 2.24 \times 2)$   
 0.89  
 $\cos^{-1}(0.89)$   
 $26.57^\circ$

Answers

1. 63.43°
2. 9.46°
3. 38.66°
4. 26.57°