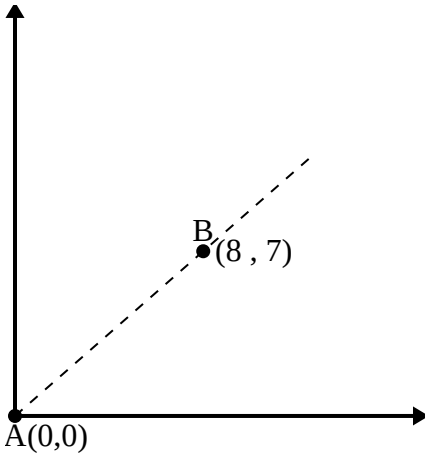
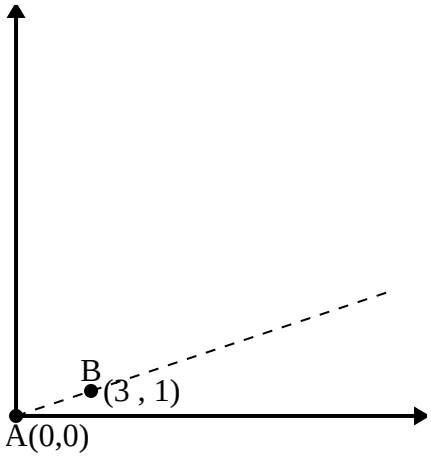
Use the law of Cosines to find the point B's angle relative to point A.

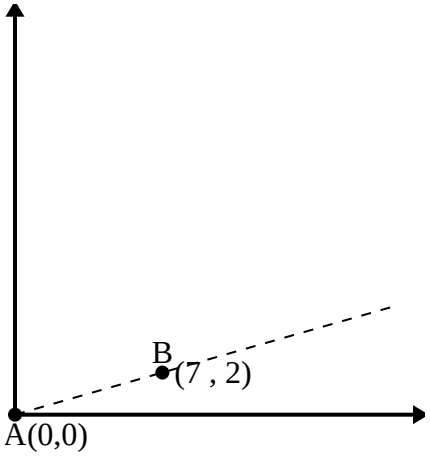
1)



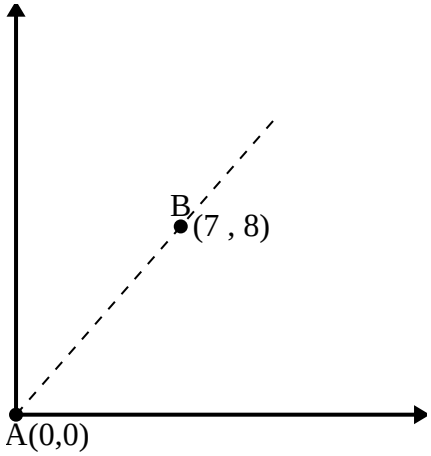
2)



3)



4)



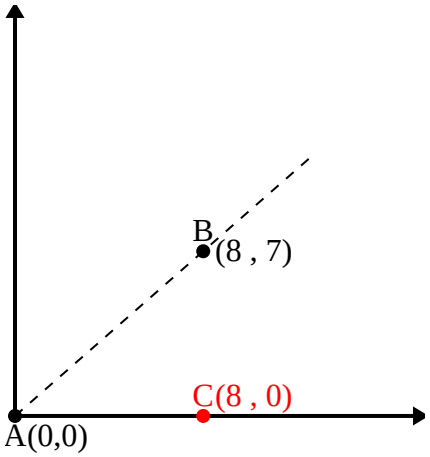
Answers

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

1-4	75	50	25	0

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

1)



$\overline{AB}$ length = 10.63

$\overline{AC}$ length = 8

$\overline{BC}$ length = 7

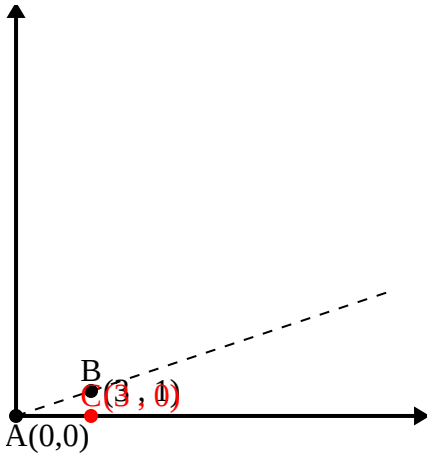
(113 + 64 + 49) ÷ (2 × 10.63 × 8)

0.75

$\cos^{-1}(0.75)$

41.19°

2)



$\overline{AB}$ length = 3.16

$\overline{AC}$ length = 3

$\overline{BC}$ length = 1

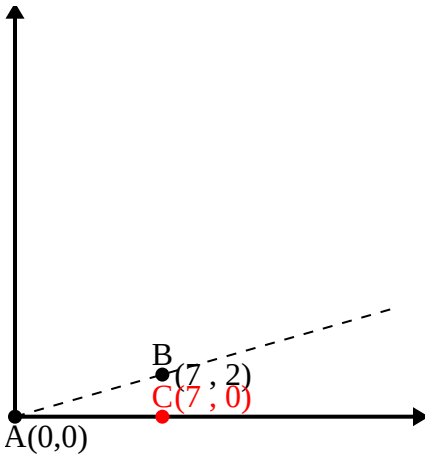
(10 + 9 + 1) ÷ (2 × 3.16 × 3)

0.95

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

18.43°

3)



$\overline{AB}$ length = 7.28

$\overline{AC}$ length = 7

$\overline{BC}$ length = 2

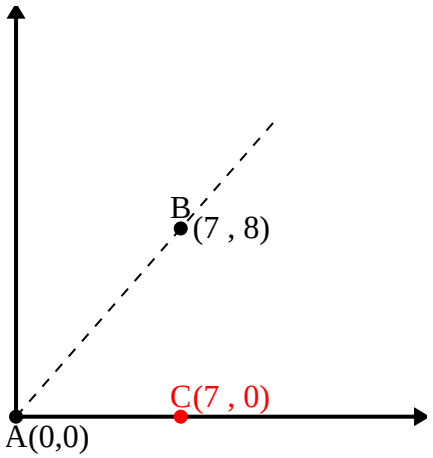
(53 + 49 + 4) ÷ (2 × 7.28 × 7)

0.96

$\cos^{-1}(0.96)$

15.95°

4)



$\overline{AB}$ length = 10.63

$\overline{AC}$ length = 7

$\overline{BC}$ length = 8

(113 + 49 + 64) ÷ (2 × 10.63 × 7)

0.66

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

48.81°

Answers

1. **41.19°**
2. **18.43°**
3. **15.95°**
4. **48.81°**

1-4	75	50	25	0