.15m

Va

ab

B

.8m

 O

 O

C A

Two V belt pullies form an integral unit and rotate about a fixed axis at O. At a certain instant point A on the belt of the smaller pully has a velocity of Va = 1.5 m/s.and point B on the belt of the larger pully has an acceleration of ab = 45m/s as shown.

For this instant determine the acceleration ac of point C , located .36 m away from point O and sketch the vector diagram.