

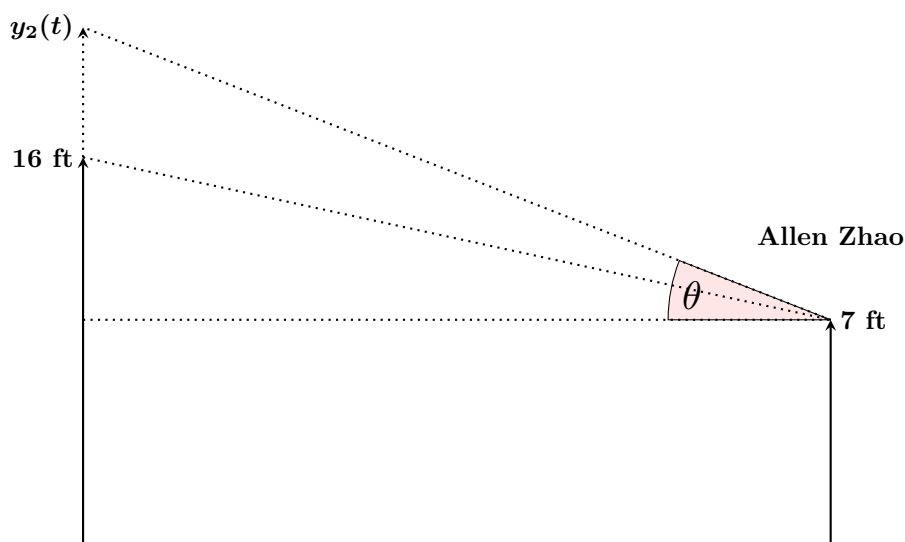
# Chad Allen Zhao gets the hottest girl in the grade

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Allen Zhao and Tacko Fall go on a fast break with 20 seconds left on the game clock. Allen must pass it directly to Fall given that Allen is accelerating at  $(0.5t^2 + 3)\frac{ft}{sec^2}$  with an initial velocity of  $14\frac{ft}{sec}$  and an initial position of 7 ft from the half-court and Fall is accelerating at  $(0.6t^2 + 3t)\frac{ft}{sec^2}$  with an initial velocity of  $18\frac{ft}{sec}$  and an initial position of 16 ft from the half-court. Allen throws the ball at  $51\frac{ft}{sec}$ . Violet, watching the crowd has already calculated the answer to her challenge to Allen: to find  $\frac{d\theta}{dt}$  when he throws the basketball at his initial position. Now, Allen must do the same.

**Tacko Fall**



Tacko Fall

