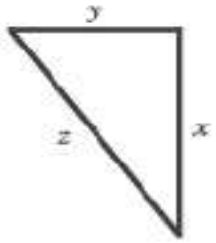
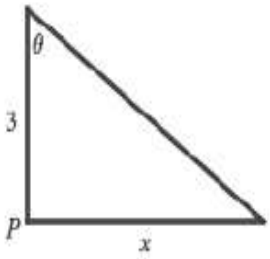
12. If we let t be time(in minutes) and S be the surface area(in cm^2), then we are given that $dS/dt = -1\ cm^2/min$. Then calculate $\frac{dS}{dt} =?$
15. $z^2 = x^2 + y^2$. To calculate $\frac{dz}{dt}$.



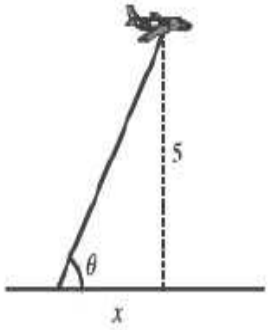
19.$A = \frac{1}{2}bh$, where b is the base and h is the altitude. To calculate $\frac{dA}{dt}$.

22. Let D denote the distance from the origin $(0, 0)$ to the point on the curve $y = \sqrt{x}$. To calculate $\frac{dD}{dt}$.

38. To calculate $\frac{d\theta}{dt}$.



39. 39.
To calculate $\frac{dx}{dt}, \frac{d\theta}{dt}$.


5
θ
x