TRANSFORMATION THEOREM (on page 216 of text) If $X$ has pal $f_{x}(x)$ and $Y=g(X)$ where $g$ is monotonic, and if $g$ has an inverse function $h$ that is differentiable, then

$$
f_{x}(y)=f_{x}(h(y)) \cdot h^{\prime}(y) \mid
$$

