

- (a) Show that the probability that Sadie takes exactly 1 red ball is  $\frac{15}{56}$ . [2]

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- 
- This image shows a full page of white paper with ten horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and extend across the entire width of the page. There is no handwriting or other markings on the paper.

[illegible]

- (c) Given that  $E(X) = \frac{15}{8}$ , find  $\text{Var}(X)$ .

[2]

[illegible]