

- 6** At a funfair, Amy pays \$1 for two attempts to make a bell ring by shooting at it with a water pistol.
- If she makes the bell ring on her first attempt, she receives \$3 and stops playing. This means that overall she has gained \$2.
 - If she makes the bell ring on her second attempt, she receives \$1.50 and stops playing. This means that overall she has gained \$0.50.
 - If she does not make the bell ring in the two attempts, she has lost her original \$1.

The probability that Amy makes the bell ring on any attempt is 0.2, independently of other attempts.

(i) Show that the probability that Amy loses her original \$1 is 0.64. [2]

This image shows a full page of white paper with horizontal dashed lines, typical of primary school writing 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.

