(1) Claire wrote a computer program that generates two random numbers between one and eight. When she runs it, what is the probability that both values will be two?

(2) You accidentally dropped a coin from the top of 11 stairs. What is the probability that it will land on the eighth step, heads up?

(3) The computer repairman is given six computers to fix. He knows that among them are 3 bad video cards and 5 failed hard drives. What is the probability that the first computer he tries has a failed hard drive but a working video card?

(4) The game show contestant spins a spinner with the letters A through H on it, then either an easy or hard question is picked randomly for her. What is the probability that the spinner will stop on the letter B and she is given a hard question?
(1) Claire wrote a computer program that generates two random numbers between one and eight. When she runs it, what is the probability that both values will be two?

\[
\frac{1}{8} \times \frac{1}{8} = \frac{1}{64}
\]

(2) You accidentally dropped a coin from the top of 11 stairs. What is the probability that it will land on the eighth step, heads up?

\[
\frac{1}{11} \times \frac{1}{2} = \frac{1}{22}
\]

(3) The computer repairman is given six computers to fix. He knows that among them are 3 bad video cards and 5 failed hard drives. What is the probability that the first computer he tries has a failed hard drive but a working video card?

\[
\frac{3}{6} \times \frac{5}{6} = \frac{15}{36} = \frac{5}{12}
\]

(4) The game show contestant spins a spinner with the letters A through H on it, then either an easy or hard question is picked randomly for her. What is the probability that the spinner will stop on the letter B and she is given a hard question?

\[
\frac{1}{8} \times \frac{1}{2} = \frac{1}{16}
\]