a) A student has a spinner with sectors numbered 1, 2, 3 and 4.

The table shows the probability of each score:

| Score | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Probability | 0.4 | 0.3 | 0.2 | 0.1 |



The student spins the spinner twice.
Calculate the probability that the student gets the same score on each spin.

What is the probability that the student spins a 1 followed by a 1 ?

To calculate the probability of scoring a 1 followed by a 1 , we multiply the probability of scoring a 1 by the probability of scoring a 1 .

$$
0.4 \times 0.4=0.16
$$

What is the probability of spinning a 2 and 2 ? Or a 3 and a 3?
...

$$
\begin{aligned}
& \mathrm{P}(2,2)=0.3 \times 0.3=0.09 \\
& \mathrm{P}(3,3)=0.2 \times 0.2=0.04 \\
& \mathrm{P}(4,4)=0.1 \times 0.1=0.01
\end{aligned}
$$

What is the
probability of spinning the same score on each spin?
b) A student has a spinner with sectors numbered $1,2,3$ and 4.
(Diagram not drawn accurately)
The table shows the probability of each score:

| Score | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Probability | 0.5 | 0.3 | 0.1 | 0.1 |



The student spins the spinner twice.
Calculate the probability that the student gets the same score on each spin.

What is the probability that the student spins a 1 followed by a 1 ?

To calculate the probability of scoring a 1 followed by a 1 , we multiply the probability of scoring a 1 by the probability of scoring a 1 .

$$
0.5 \times 0.5=0.25
$$

What is the probability of spinning a 2 and 2? Or a 3 and a 3?
...
...

$$
\begin{aligned}
& \mathrm{P}(2,2)=0.3 \times 0.3=0.09 \\
& \mathrm{P}(3,3)=0.1 \times 0.1=0.01 \\
& \mathrm{P}(4,4)=0.1 \times 0.1=0.01
\end{aligned}
$$

What is the probability of
spinning the same score on each spin?
c) A student has a spinner with sectors numbered $1,2,3$ and 4.
(Diagram not drawn accurately)
The table shows the probability of each score:

| Score | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Probability | 0.2 | 0.6 | 0.05 | 0.15 |



The student spins the spinner twice.
Calculate the probability that the student gets the same score on each spin.

What is the probability that the student spins a 1 followed by a 1 ?

To calculate the probability of scoring a 1 followed by a 1 , we multiply the probability of scoring a 1 by the probability of scoring a 1 .

$$
0.2 \times 0.2=0.04
$$

## What is the

probability of
spinning a 2 and 2 ?
Or a 3 and a 3?
...

What is the probability of spinning the same score on each spin?
d) A student has a spinner with sectors numbered $1,2,3$ and 4.
(Diagram not drawn accurately)
The table shows the probability of each score:

| Score | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| Probability | 0.42 | 0.25 | 0.19 | 0.14 |



The student spins the spinner twice.
Calculate the probability that the student gets the same score on each spin.

