## Sum of Two Dice Probabilities (D)

Find the probability of each sum when two dice are rolled.

$P(12)=$

$$
P(\geq 2)=
$$

$P(>10)=$
$P(\geq 8)=$

$$
\mathrm{P}(>3)=
$$

$P(\leq 4)=$

$$
P(\leq 2)=
$$

$P(<3)=$

$$
P(\geq 6)=
$$

$\mathrm{P}(<4)=$

$$
P(\leq 11)=
$$

$P(9)=$

$$
P(<6)=
$$

$$
\mathrm{P}(12)=
$$

$P(\leq 9)=$
$\mathrm{P}(\leq 3)=$

| $\mathbf{+}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 2 | 3 | 4 | 5 | 6 | 7 |
| $\mathbf{2}$ | 3 | 4 | 5 | 6 | 7 | 8 |
| $\mathbf{3}$ | 4 | 5 | 6 | 7 | 8 | 9 |
| $\mathbf{4}$ | 5 | 6 | 7 | 8 | 9 | 10 |
| $\mathbf{5}$ | 6 | 7 | 8 | 9 | 10 | 11 |
| $\mathbf{6}$ | 7 | 8 | 9 | 10 | 11 | 12 |

## Sum of Two Dice Probabilities (D) Answers

Find the probability of each sum when two dice are rolled.


$$
\begin{array}{r}
P(12)=1 / 36 \\
1 / 36
\end{array}
$$

$$
P(\geq 2)=36 / 36
$$

$1 / 1$

$$
P(>3)=33 / 36
$$

$$
11 / 12
$$

$$
P(\leq 2)=1 / 36
$$

1/36

$$
P(\geq 6)=26 / 36
$$

$$
13 / 18
$$

$$
\begin{array}{r}
\mathrm{P}(\leq 11)=35 / 36 \\
35 / 36
\end{array}
$$

$$
\mathrm{P}(<6)=10 / 36
$$

$$
5 / 18
$$

$$
\begin{array}{r}
P(\leq 9)=30 / 36 \\
5 / 6
\end{array}
$$

| $\mathbf{+}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 2 | 3 | 4 | 5 | 6 | 7 |
| $\mathbf{2}$ | 3 | 4 | 5 | 6 | 7 | 8 |
| $\mathbf{3}$ | 4 | 5 | 6 | 7 | 8 | 9 |
| $\mathbf{4}$ | 5 | 6 | 7 | 8 | 9 | 10 |
| $\mathbf{5}$ | 6 | 7 | 8 | 9 | 10 | 11 |
| $\mathbf{6}$ | 7 | 8 | 9 | 10 | 11 | 12 |

$$
P(>10)=3 / 36
$$

$$
1 / 12
$$

$P(\geq 8)=15 / 36$ 5/12

$$
P(\leq 4)=6 / 36
$$

$$
1 / 6
$$

$$
\mathrm{P}(<3)=1 / 36
$$

$$
1 / 36
$$

$$
\mathrm{P}(<4)=3 / 36
$$

$$
1 / 12
$$

$$
P(9)=4 / 36
$$

$$
1 / 9
$$

$$
P(12)=1 / 36
$$

$$
1 / 36
$$

$$
P(\leq 3)=3 / 36
$$

$$
1 / 12
$$

