## Sum of Two Dice Probabilities (E)

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

$\mathrm{P}(<9)=$

$$
P(\leq 11)=
$$

$$
P(\leq 3)=
$$

$$
P(9)=
$$

$$
P(\geq 3)=
$$

$$
P(>4)=
$$

$$
P(\leq 12)=
$$

$P(\leq 12)=$

| $\mathbf{+}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 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 |

$P(\geq 6)=$
$P(6)=$
$P(<3)=$
$P(2)=$
$\mathrm{P}(>8)=$

$$
P(\leq 4)=
$$

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

$P(>11)=$

## Sum of Two Dice Probabilities (E) Answers

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


$$
\begin{array}{r}
\mathrm{P}(<9)=26 / 36 \\
13 / 18
\end{array}
$$

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

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

$$
1 / 12
$$

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

$$
P(\geq 3)=35 / 36
$$

$$
35 / 36
$$

$$
P(>4)=30 / 36
$$

$$
5 / 6
$$

$$
P(\leq 12)=36 / 36
$$

$$
1 / 1
$$

$$
P(\leq 12)=36 / 36
$$

$$
1 / 1
$$

| $\mathbf{+}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | 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 |

$P(\geq 6)=26 / 36$ 13/18
$P(6)=5 / 36$ 5/36
$\mathrm{P}(<3)=1 / 36$
1/36
$P(2)=1 / 36$
1/36
$P(>8)=10 / 36$
5/18
$P(\leq 4)=6 / 36$
1/6

$$
P(<3)=1 / 36
$$

$$
1 / 36
$$

$$
P(>11)=1 / 36
$$

$$
1 / 36
$$

