## Sum of Two Dice Probabilities (B)

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

$P(>3)=$

$$
P(\geq 12)=
$$

$$
P(\leq 6)=
$$

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

$$
P(\leq 3)=
$$

$$
P(>10)=
$$

$$
\mathrm{P}(<11)=
$$

$P(\geq 5)=$

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

$P(<11)=$
$P(>6)=$
$P(\geq 5)=$
$P(\geq 10)=$
$P(\geq 6)=$

$$
P(\leq 10)=
$$

$P(\leq 8)=$
$P(<11)=$

## Sum of Two Dice Probabilities (B) Answers

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


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

11/12

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

$$
P(\leq 6)=15 / 36
$$

$$
5 / 12
$$

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

1/36

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

$$
1 / 12
$$

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

$$
1 / 12
$$

$$
\begin{array}{r}
P(<11)=33 / 36 \\
11 / 12
\end{array}
$$

$$
P(\geq 5)=30 / 36
$$

$$
5 / 6
$$

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

$$
\begin{array}{r}
\mathrm{P}(<11)=33 / 36 \\
11 / 12
\end{array}
$$

$P(>6)=21 / 36$ 7/12
$P(\geq 5)=30 / 36$
5/6

$$
P(\geq 10)=6 / 36
$$

$$
1 / 6
$$

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

$$
13 / 18
$$

$$
P(\leq 10)=33 / 36
$$

$$
11 / 12
$$

$$
P(\leq 8)=26 / 36
$$

$$
13 / 18
$$

$$
\begin{array}{r}
\mathrm{P}(<11)=33 / 36 \\
11 / 12
\end{array}
$$

