## Sum of Two Dice Probabilities (J)

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

$P(7)=$

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

$$
P(\leq 10)=
$$

$$
P(>5)=
$$

$P(11)=$

$$
\mathrm{P}(\leq 2)=
$$

$$
P(>5)=
$$

$$
P(>5)=
$$

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

$\mathrm{P}(<5)=$
$P(>9)=$
$P(3)=$

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

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

$$
P(\geq 12)=
$$

$$
P(>12)=
$$

$$
\mathrm{P}(\leq 5)=
$$

$P(\geq 6)=$

## Sum of Two Dice Probabilities (J) Answers

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

$P(7)=6 / 36$
1/6

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

1/6

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

11/12
$P(>5)=26 / 36$
13/18

$$
P(11)=2 / 36
$$

1/18

$$
\begin{array}{r}
P(\leq 2)=1 / 36 \\
1 / 36
\end{array}
$$

$$
P(>5)=26 / 36
$$

$$
13 / 18
$$

$$
P(>5)=26 / 36
$$

$$
13 / 18
$$

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

$\mathrm{P}(<5)=6 / 36$
1/6
$P(>9)=6 / 36$
1/6
$P(3)=2 / 36$
$1 / 18$

$$
\begin{array}{r}
\mathrm{P}(<12)=35 / 36 \\
35 / 36
\end{array}
$$

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

$$
P(>12)=0 / 36
$$

$$
0
$$

$$
P(\leq 5)=10 / 36
$$

$$
5 / 18
$$

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

$$
13 / 18
$$

