Roll 2 dice, let $X$ denote the maximum that appears.

$X = 6$ with prob $4/36$
$X = 5$ with prob $9/36$
$X = 4$ with prob $7/36$
$X = 3$ with prob $5/36$
$X = 2$ with prob $3/36$
$X = 1$ with prob $1/36$

$$E(X) = \frac{(1)(\frac{1}{36}) + (2)(\frac{2}{36}) + (3)(\frac{3}{36}) + (4)(\frac{4}{36}) + (5)(\frac{5}{36}) + (6)(\frac{6}{36})}{36}$$
$$= \frac{1 + 6 + 15 + 28 + 45 + 66}{36}$$
$$= \frac{161}{36} \approx 4.472$$

Here, $E(X)$ is not equal to 1 or 2 or 3... or 6
That's OK. Do not round $E(X)$ (say) down to 4.
$E(X) = \frac{161}{36}$ exactly.