



# Probability Random Variables - Probability Table and Ticket Price to Is Fair

1

A ticket costs \$16.5. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$0	0.10
\$5	0.10
\$20	0.80

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

2

A ticket costs \$8. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$0	0.20
\$5	0.60
\$15	0.20

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

3

A ticket costs \$19. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$10	0.30
\$20	0.30
\$25	0.40

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

4

A ticket costs \$21.5. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$0	0.10
\$15	0.10
\$25	0.80

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

5

A ticket costs \$22.5. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$15	0.30
\$20	0.10
\$25	0.60

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

6

A ticket costs \$10.5. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$5	0.80
\$15	0.10
\$20	0.10

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

7

A ticket costs \$19.5. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$5	0.20
\$10	0.10
\$25	0.70

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair

8

A ticket costs \$19.5. A game is fair when the ticket price equals the expected value.

Prize	$P(X)$
\$5	0.30
\$20	0.30
\$25	0.40

Is this a fair game?

- A  
Yes, the game is fair
- B  
No, the game is not fair