Suppose f(x,y)=(x+2y)/18, x=1,2; y=1,2 is the joint pmf of X and Y.

Determine the following probabilities and expected value:

1. P(X=1, Y=1)

a.

1. P(X=1, Y=2)

b.

1. P(X=1)

d.

1. P(X=2)

e.

1. E(X)

f.

1. 1/6
2. 5/18
3. 2/9
4. 4/9
5. 5/9
6. 14/9
7. 23/9