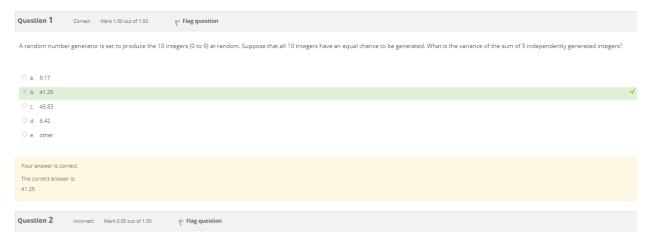
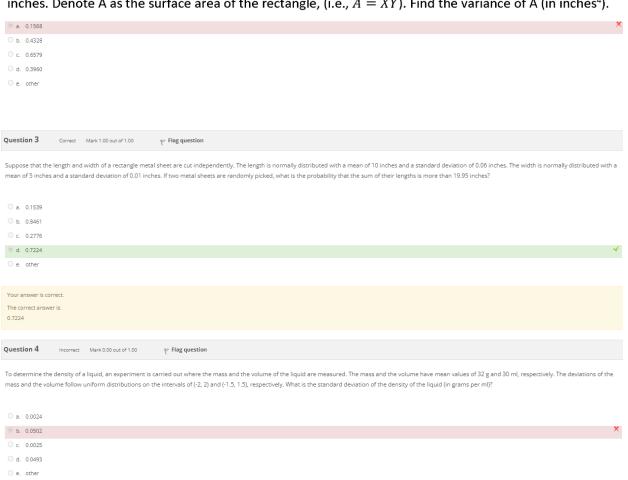
## Quiz 7:

Question 1	Correct	Mark 1.00 out of 1.00	₹ Flag question	
Two balls numbe and the second p Determine the m  (A) 1/4  (B) 1/2  (C) 1	articipant,	respectively.	th participant is asked to take one ball out at random. Record the number on the ball before returning it to the box. Denote $X_1$ and $X_2$ as the number recorded by the first participant is asked to take one ball out at random. Record the number on the ball before returning it to the box. Denote $X_1$ and $X_2$ as the number recorded by the first participant is asked to take one ball out at random. Record the number on the ball before returning it to the box. Denote $X_1$ and $X_2$ as the number recorded by the first participant is asked to take one ball out at random. Record the number on the ball before returning it to the box. Denote $X_1$ and $X_2$ as the number recorded by the first participant is asked to take one ball out at random.	șt.
(c) 1				<b>√</b>
(E) other				
Your answer is co The correct answer (D) 0				
Question 2	Correct	Mark 1.00 out of 1.00	₹ Flag question	
The following table		ses of the joint probability mass	s function of two random variables $X$ and $Y$ . $\begin{array}{c} f_{T'}(x,y) \\ 0.1 \\ 0.4 \\ 0.3 \\ 0.2 \\ \end{array}$	
(A) - 0.25				
(B) 0.05				
(C) - 0.05				4
O (D) 0				
(E) other				
Question 3	Correct	Mark 1.00 out of 1.00	F Flag question	
The following table  Are the variables.  (A) Yes		x y 0 0 1 0 1 1	as function of two random variables $X$ and $Y$ .	
(B) No				✓
Your answer is c The correct answ (B) No				
Question 4	Correct	Mark 1.00 out of 1.00	P Flag question	
$f_{XY}(x,y) = 0.25$ . Find the variance (A) 1 (B) 0 (C) 1/4	for (x, y)	function of two random vs $= (-1.0), (0.0), (1.0), and (0.0), (0$	ariables X and Y is given as, 0,1).	√
(E) other				<b>√</b>
(E) other				

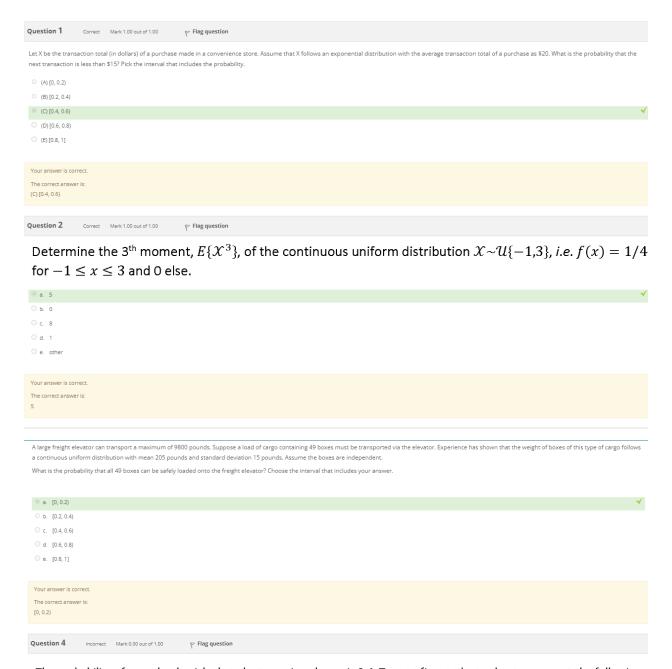
## Quiz 8



Manufactured rectangle metal sheets have an average width of 7 inches and an average length of 3 inches. Assume independence between the width (X) and the length (Y). The deviation in length is uniformly distributed on [-0.07, 0.07] inches, and the deviation in width is uniformly distributed on [-0.16, 0.16] inches. Denote A as the surface area of the rectangle, (i.e., A = XY). Find the variance of A (in inches<sup>4</sup>).



Quiz 9:



The probability of a randomly picked student wearing glasses is 0.4. Twenty-five students plan to carry out the following experiment independently: they each pick 10 random students on campus and record the number of students wearing glasses out of the 10. Denote  $X_i$  as the number recorded by the  $i^{\text{th}}$  student. What is the probability that they observe more than 95 students wearing glasses in total? Choose the interval that includes your answer.

