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02405 Probability
2005-3-11
BFN/bfn

Question a) # of days 28 30 31
frequency

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Question a)	# of days	28	30	31
	frequency	1		

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Question a)	# of days	28	30	31
	frequency	1	4	7

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) =$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} +$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} =$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) =$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot$$

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Question a) # of days 28 30 31
 frequency 1 4 7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} +$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) =$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2)}$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} =$$

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	# of days	28	30	31
Question a)	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

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Question a) # of days 28 30 31
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$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b) # of days 28 30 31
 frequency

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$		

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) =$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} =$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) =$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot \frac{28}{365} +$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

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$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot \frac{28}{365} + 30^2 \cdot \frac{120}{365} + 31^2 \cdot \frac{217}{365} = \frac{338489}{365}$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot \frac{28}{365} + 30^2 \cdot \frac{120}{365} + 31^2 \cdot \frac{217}{365} = \frac{338489}{365}$$

$$SD(X) =$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot \frac{28}{365} + 30^2 \cdot \frac{120}{365} + 31^2 \cdot \frac{217}{365} = \frac{338489}{365}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2}$$

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Question a)	# of days	28	30	31
	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot \frac{28}{365} + 30^2 \cdot \frac{120}{365} + 31^2 \cdot \frac{217}{365} = \frac{338489}{365}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} =$$

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	frequency	1	4	7

$$E(X) = 28 \cdot \frac{1}{12} + 30 \cdot \frac{4}{12} + 31 \cdot \frac{7}{12} = \frac{365}{12} = (30.42)$$

$$E(X^2) = 28^2 \cdot \frac{1}{12} + 30^2 \cdot \frac{4}{12} + 31^2 \cdot \frac{7}{12}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.86$$

Question b)	# of days	28	30	31
	frequency	$\frac{28}{365}$	$\frac{120}{365}$	$\frac{217}{365}$

$$E(X) = 28 \cdot \frac{28}{365} + 30 \cdot \frac{120}{365} + 31 \cdot \frac{217}{365} = \frac{11111}{365}$$

$$E(X^2) = 28^2 \cdot \frac{28}{365} + 30^2 \cdot \frac{120}{365} + 31^2 \cdot \frac{217}{365} = \frac{338489}{365}$$

$$SD(X) = \sqrt{E(X^2) - E(X)^2} = 0.841$$