a)

Morgan is playing a computer game.
They can score 0, 1, 2 or 3 points on each turn.
They record their scores for 100 turns.
The table shows the relative frequencies of their scores.

Score	0	1	2	3
Relative Frequency	0.08	0.42	0.38	

Morgan says "I scored more than 160 points in total in my 100 turns."
Is Morgan correct?

What is the missing relative frequency?	Sum of relative frequencies $= 1$ $1 - (0.08 + 0.42 + 0.38) = 0.12$
How many points did Morgan score?	0 points $0.08 \times 100 = 8$ turns 8×0 points $= 0$ points 1 point $0.42 \times 100 = 42$ turns 42×1 point $= 42$ points 2 points $0.38 \times 100 = 38$ turns 38×2 points $= 76$ points 3 points $0.12 \times 100 = 12$ turns 12×3 points $= 36$ points $0 + 42 + 76 + 36 = 154$
Is Morgan correct?	Morgan is not correct.

b)

Morgan is playing a computer game.
They can score 0, 1, 2 or 3 points on each turn.
They record their scores for 100 turns.
The table shows the relative frequencies of their scores.

Score	0	1	2	3
Relative Frequency	0.06	0.38	0.42	

Morgan says "I scored more than 160 points in total in my 100 turns."
Is Morgan correct?

What is the missing relative frequency?	Sum of relative frequencies $= 1$ $1 - (0.06 + 0.38 + 0.42) = 0.14$
How many points did Morgan score?	0 points $0.06 \times 100 = 6$ turns 6×0 points $= 0$ points 1 point $0.38 \times 100 = 38$ turns 38×1 point $= 38$ points 2 points $0.42 \times 100 = 42$ turns 42×2 points $= 84$ points
Is Morgan correct?	

BACKWARD FADED MATHS

c)
Morgan is playing a computer game.
They can score 1, 2, 3 or 5 points on each turn.
They record their scores for 100 turns.
The table shows the relative frequencies of their scores.

Score	1	2	3	5
Relative Frequency	0.08	0.4	0.38	

Morgan says "I scored more than 160 points in total in my 100 turns."
Is Morgan correct?

What is the missing relative frequency?	Sum of relative frequencies $= 1$ $$1 - (0.08 + 0.4 + 0.38) = 0.14$$
How many points did Morgan score?	
Is Morgan correct?	

d)
Morgan is playing a computer game.
They can score 0, 1, 2 or 3 points on each turn.
They record their scores for 300 turns.
The table shows the relative frequencies of their scores.

Score	0	1	2	3
Relative Frequency	0.11	0.35	0.34	

Morgan says "I scored more than 600 points in total in my 300 turns."
Is Morgan correct?