Averages from Grouped Frequency Tables GREEN

Q1. The table gives some information about the lengths of time, in hours, that some adults watched TV last week.

|  |  |
| --- | --- |
| **Length of time (**$t$ **hours)** | **Frequency** |
| $$0\leq t<10$$ | $$8$$ |
| $$10\leq t<15$$ | $$15$$ |
| $$15\leq t<20$$ | $$11$$ |
| $$20\leq t<30$$ | $$10$$ |
| $$30\leq t<50$$ | $$6$$ |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q2. The table shows some information about the prices of 64 second-hand cars that are for sale.

|  |  |
| --- | --- |
| **Price (£**$x$**)** | **Frequency** |
| $$0<x\leq 2000$$ | $$8$$ |
| $$2000<x\leq 4000$$ | $$14$$ |
| $$4000<x\leq 6000$$ | $$28$$ |
| $$6000<x\leq 8000$$ | $$10$$ |
| $$8000<x\leq 10000$$ | $$4$$ |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q3. The table shows some information about the times, in minutes, 60 people took to get to work.

|  |  |
| --- | --- |
| **Time (**$x$ **minutes)** | **Frequency** |
| $$0<x\leq 10$$ | $$5$$ |
| $$10<x\leq 30$$ | $$11$$ |
| $$30<x\leq 50$$ | $$23$$ |
| $$50<x\leq 80$$ | $$13$$ |
| $$80<x\leq 100$$ | $$8$$ |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q4. The table shows information about the ages of 90 employees in a factory.

|  |  |
| --- | --- |
| **Age (**$a$ **years)** | **Frequency** |
| $$15<a\leq 25$$ | $$12$$ |
| $$25<a\leq 35$$ | $$27$$ |
| $$35<a\leq 45$$ | $$18$$ |
| $$45<a\leq 55$$ | $$23$$ |
| $$55<a\leq 65$$ | $$10$$ |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Averages from Grouped Frequency Tables AMBER

Q1. The table gives some information about the lengths of time, in hours, that some adults watched TV last week.

|  |  |  |  |
| --- | --- | --- | --- |
| **Length of time (**$t$ **hours)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$0\leq t<10$$ | $$8$$ |  |  |
| $$10\leq t<15$$ | $$15$$ |  |  |
| $$15\leq t<20$$ | $$11$$ |  |  |
| $$20\leq t<30$$ | $$10$$ |  |  |
| $$30\leq t<50$$ | $$6$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

 Estimate for total number of hours ÷ total number of adults

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q2. The table shows some information about the prices of 64 second-hand cars that are for sale.

|  |  |  |  |
| --- | --- | --- | --- |
| **Price (£**$x$**)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$0<x\leq 2000$$ | $$8$$ |  |  |
| $$2000<x\leq 4000$$ | $$14$$ |  |  |
| $$4000<x\leq 6000$$ | $$28$$ |  |  |
| $$6000<x\leq 8000$$ | $$10$$ |  |  |
| $$8000<x\leq 10000$$ | $$4$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q3. The table shows some information about the times, in minutes, 60 people took to get to work.

|  |  |  |  |
| --- | --- | --- | --- |
| **Time (**$x$ **minutes)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$0<x\leq 10$$ | $$5$$ |  |  |
| $$10<x\leq 30$$ | $$11$$ |  |  |
| $$30<x\leq 50$$ | $$23$$ |  |  |
| $$50<x\leq 80$$ | $$13$$ |  |  |
| $$80<x\leq 100$$ | $$8$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q4. The table shows information about the ages of 90 employees in a factory.

|  |  |  |  |
| --- | --- | --- | --- |
| **Age (**$a$ **years)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$15<a\leq 25$$ | $$12$$ |  |  |
| $$25<a\leq 35$$ | $$27$$ |  |  |
| $$35<a\leq 45$$ | $$18$$ |  |  |
| $$45<a\leq 55$$ | $$23$$ |  |  |
| $$55<a\leq 65$$ | $$10$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Averages from Grouped Frequency Tables RED

Q1. The table gives some information about the lengths of time, in hours, that some adults watched TV last week.

|  |  |  |  |
| --- | --- | --- | --- |
| **Length of time (**$t$ **hours)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$0\leq t<10$$ | $$8$$ | 5 | 40 |
| $$10\leq t<15$$ | $$15$$ | 12.5 | 187.5 |
| $$15\leq t<20$$ | $$11$$ | 17.5 |  |
| $$20\leq t<30$$ | $$10$$ |  |  |
| $$30\leq t<50$$ | $$6$$ |  |  |

 a) Write down the modal class. (most frequent)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies. (middle value)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

 Estimate for total number of hours ÷ total number of adults

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q2. The table shows some information about the prices of 64 second-hand cars that are for sale.

|  |  |  |  |
| --- | --- | --- | --- |
| **Price (£**$x$**)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$0<x\leq 2000$$ | $$8$$ |  |  |
| $$2000<x\leq 4000$$ | $$14$$ |  |  |
| $$4000<x\leq 6000$$ | $$28$$ |  |  |
| $$6000<x\leq 8000$$ | $$10$$ |  |  |
| $$8000<x\leq 10000$$ | $$4$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

 Estimate for total number of pounds ÷ total number of cars

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q3. The table shows some information about the times, in minutes, 60 people took to get to work.

|  |  |  |  |
| --- | --- | --- | --- |
| **Time (**$x$ **minutes)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$0<x\leq 10$$ | $$5$$ |  |  |
| $$10<x\leq 30$$ | $$11$$ |  |  |
| $$30<x\leq 50$$ | $$23$$ |  |  |
| $$50<x\leq 80$$ | $$13$$ |  |  |
| $$80<x\leq 100$$ | $$8$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

 Estimate for total number of minutes ÷ total number of people

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q4. The table shows information about the ages of 90 employees in a factory.

|  |  |  |  |
| --- | --- | --- | --- |
| **Age (**$a$ **years)** | **Frequency** | **Midpoint** | $$fx$$ |
| $$15<a\leq 25$$ | $$12$$ |  |  |
| $$25<a\leq 35$$ | $$27$$ |  |  |
| $$35<a\leq 45$$ | $$18$$ |  |  |
| $$45<a\leq 55$$ | $$23$$ |  |  |
| $$55<a\leq 65$$ | $$10$$ |  |  |

 a) Write down the modal class.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Work out the class in which the median lies.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) Calculate an estimate for the mean.

 Estimate for total number of years ÷ total number of employees

\_\_\_\_\_\_\_\_\_\_\_\_\_\_