**Estimating the Mean from a Grouped Frequency Table**

For each table, calculate an estimate for the mean mass.

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$1$$ |
| $$10<x\leq 20$$ | $$2$$ |
| $$20<x\leq 30$$ | $$4$$ |
| $$30<x\leq 40$$ | $$3$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 5$$ | $$20$$ |
| $$5<x\leq 10$$ | $$1$$ |
| $$10<x\leq 15$$ | $$8$$ |
| $$15<x\leq 20$$ | $$6$$ |

1.

6.

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$2$$ |
| $$10<x\leq 20$$ | $$4$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 5$$ | $$20$$ |
| $$5<x\leq 10$$ | $$1$$ |
| $$10<x\leq 15$$ | $$8$$ |
| $$15<x\leq 20$$ | $$21$$ |

2.

7.

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$4$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 5$$ | $$20$$ |
| $$5<x\leq 10$$ | $$1$$ |
| $$10<x\leq 15$$ | $$8$$ |
| $$15<x\leq 35$$ | $$21$$ |

3.

8.

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$20$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$1$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 70$$ | $$21$$ |

4.

9.

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$1$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$1<x\leq 11$$ | $$20$$ |
| $$11<x\leq 21$$ | $$1$$ |
| $$21<x\leq 31$$ | $$8$$ |
| $$31<x\leq 71$$ | $$21$$ |

5.

10.

**Estimating the Mean from a Grouped Frequency Table: ANSWERS**

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$1$$ |
| $$10<x\leq 20$$ | $$2$$ |
| $$20<x\leq 30$$ | $$4$$ |
| $$30<x\leq 40$$ | $$3$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 5$$ | $$20$$ |
| $$5<x\leq 10$$ | $$1$$ |
| $$10<x\leq 15$$ | $$8$$ |
| $$15<x\leq 20$$ | $$6$$ |

1.

6.

7.5kg

24kg

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$2$$ |
| $$10<x\leq 20$$ | $$4$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 5$$ | $$20$$ |
| $$5<x\leq 10$$ | $$1$$ |
| $$10<x\leq 15$$ | $$8$$ |
| $$15<x\leq 20$$ | $$21$$ |

2.

7.

24kg

10.5kg

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$4$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 5$$ | $$20$$ |
| $$5<x\leq 10$$ | $$1$$ |
| $$10<x\leq 15$$ | $$8$$ |
| $$15<x\leq 35$$ | $$21$$ |

3.

8.

15kg

13.65kg

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$20$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$1$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 70$$ | $$21$$ |

4.

9.

27.5kg

15kg

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$0<x\leq 10$$ | $$20$$ |
| $$10<x\leq 20$$ | $$1$$ |
| $$20<x\leq 30$$ | $$8$$ |
| $$30<x\leq 40$$ | $$6$$ |

|  |  |
| --- | --- |
| **Mass,** $x$ **(kg)** | **Frequency** |
| $$1<x\leq 11$$ | $$20$$ |
| $$11<x\leq 21$$ | $$1$$ |
| $$21<x\leq 31$$ | $$8$$ |
| $$31<x\leq 71$$ | $$21$$ |

5.

10.

28.5kg

15kg