

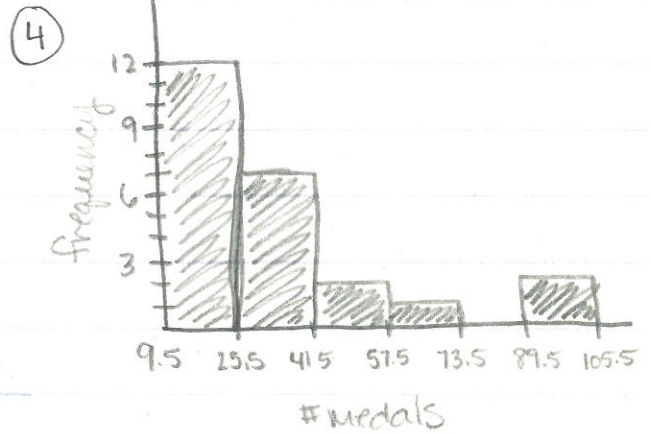
Task #1:

# Medals	frequency
10-25	12
26-41	6
42-57	2
58-73	1
74-89	0
90-105	2

$$\text{classwidth} = \frac{100-9}{6} = 15.2$$

$$\text{class width} = 16$$

2004 Olympic Medals



# Medals	relative frequency
10-25	0.52
26-41	0.26
42-57	0.09
58-73	0.04
74-89	0
90-105	0.09

found by taking frequency and dividing by the total

# Medals	cumulative frequency
Less than 25.5	12
< 41.5	18
< 57.5	20
< 73.5	21
< 89.5	21
< 105.5	23

stem	leaves
1	0002256799
2	737
3	00237
4	9
5	0
6	3
7	
8	
9	2
10	0

Task #1 - 2nd set of ?s

- ① 42
- ② 17.5
- ③ 105.5

④	(X)	(f)
	Class Marks	Frequency
④	17.5	12
⑤	33.5	7
	49.5	2
	65.5	1
	81.5	0
	97.5	2
		<u>2</u>
		total = 24

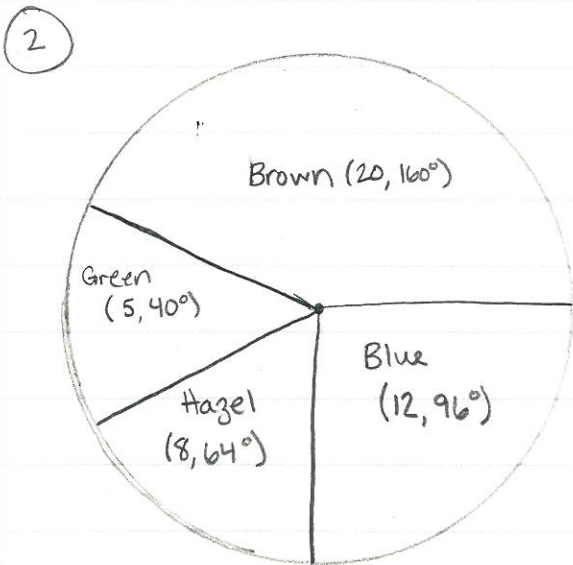
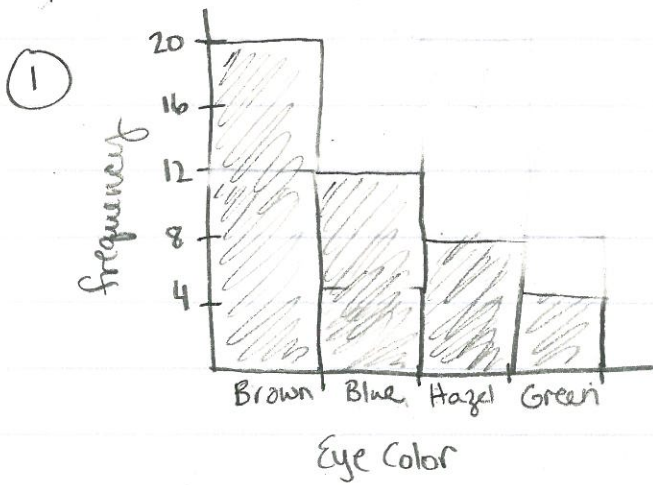
$\bar{X} \text{ (Mean)} = 33.5$

~~$S_x \text{ (standard deviation)} = 24.12$~~

<u>X · f</u>
210
234.5
99
65.5
0
<u>195</u>
total = 804

$$\frac{\sum f \cdot x}{\sum f} = \frac{804}{24} = \underline{\underline{33.5}}$$

Task #2:



45 total

$$\text{Blue} = \frac{12}{45} \cdot 360^\circ = 96^\circ$$

$$\text{Green} = \frac{5}{45} \cdot 360^\circ = 40^\circ$$

$$\text{Brown} = \frac{20}{45} \cdot 360^\circ = 160^\circ$$

$$\text{Hazel} = \frac{8}{45} \cdot 360^\circ = 64^\circ$$

Task #3:

* Put data into L_1 , leave L_2 empty \rightarrow 1Var Stats

① \bar{x} (mean) = 62

② \tilde{x} (Median) = 63

③ Mode = 52

④ Midrange = $\frac{52+76}{2} = 64$

⑤ Range = $76-52 = 24$

⑥ $s = 9.2$

⑦ $Q_1 = 52$

⑧ $Q_3 = 69$

2 part of Task #3

①+②	L_1 Class Marks	L_2 Frequency	\rightarrow 1Var stats L_1, L_2
	45.5	2	$\bar{x} = 76.44$ $s = 12.79$
	55.5	1	
	65.5	5	
	75.5	12	
	85.5	8	
	95.5	4	