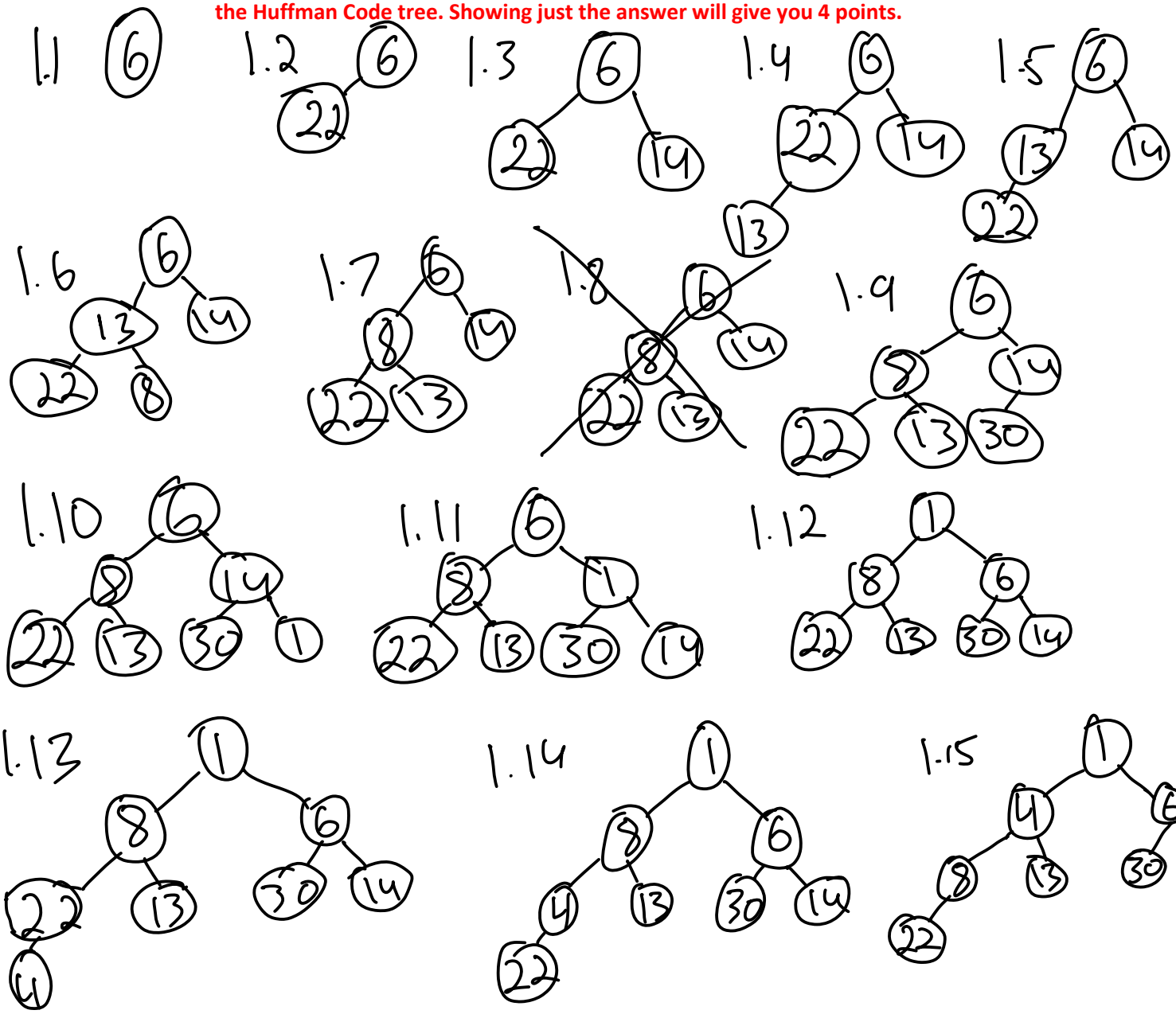
Homework Heap priority queue and Huffman Code

1. (10 points) Complete a Heap priority queue 6,22,14,13,8,30,1,4. **Show all your drawings, step by step to get full credit. Every time you add a new node draw a different drawing. Showing just the answer will give you 4 points.**
2. (10 points) Use Huffman coding to encode these symbols with given frequencies: a: 20, b: 10, c: 15, d: 25, and e: 30. Create the Huffman Code binary tree and the Huffman table that represents the binary code for each character. **Show all your drawings, step by step to get full credit for the Huffman Code tree. Showing just the answer will give you 4 points.**



10	15	20	25	30
b	c	a	d	e

2.1

20	25	25	30
a	null	d	e

10+15=25

10	15
b	c

2.2

25	30	45
d	e	null

20+25=45

20	25
a	null

10	15
b	c

2.3

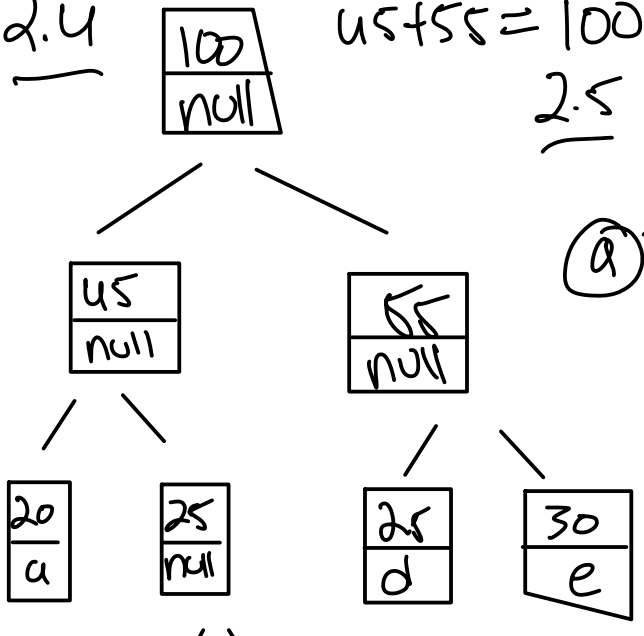
45	55
null	null

25+30=55

20	25	25	30
a	null	d	e

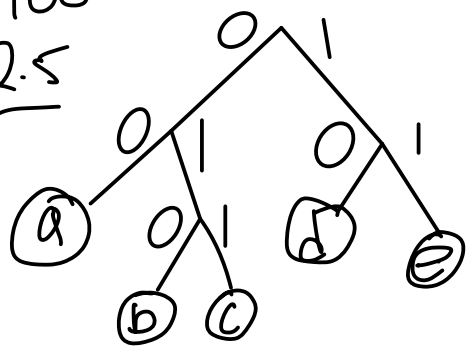
10	15
b	c

2.4



45+55=100

2.5



2.6

a = 00
b = 010
c = 011
d = 10
e = 11