Exercise 1: (1.75 ptos) Given the following table representing a random variable:

x_i	[0,2]	(2,4]	(4,6]	(6,8]
f_i	12	15	9	7

a) Find the range and the median
b) Find Pearson's coefficient of variation

Exercise 2: (1.5 points) Given the following table showing the values and frequencies of a certain random variable

x_i	1	2	3	4	5
f_i	9	6	8	9	4

a) Find the percentage corresponding to each value of the variable
b) Find the measures of central tendency

Exercise 3: (2.5 ptos) Work out:

a) $\sqrt[5]{a^3} \cdot \sqrt[3]{a^{-2}} : \sqrt{a^{-1}} =$

b) $\dfrac{\sqrt{a^{-1}} \cdot \sqrt[7]{a^{-5}b^2}}{\sqrt[10]{a^4 b^{-7}}} =$

c) $3\sqrt{75} - 2\sqrt{48} + \sqrt{300} =$

Exercise 4: (1.5 ptos) Find these unions and intersections of intervals and **write them as inequalities too**

a) $[-5,1] \cup [0,+\infty) =$

b) $(-3,2] \cap [0,5] =$

c) $(-\infty,3) \cap [2,+\infty) =$

Exercise 5: (1.75 ptos) Work out and express the answers using scientific notation:

a) $4.25 \cdot 10^{-4} - 3.1 \cdot 10^{-3} + 8.32 \cdot 10^{-1} =$

b) $(7.12 \cdot 10^{-5}) \cdot (3.41 \cdot 10^{-8}) =$

c) $(1.85 \cdot 10^{-1}) : (7.92 \cdot 10^{-5}) =$

Exercise 6: (1 pto) Eighteen elves can hang one thousand and twenty Christmas balls in fifteen trees in one day. How many elves do we need to hang three thousand balls in twenty-one trees?