Letter grades for Math 162 final exam of December 18, 2022

$$
\begin{array}{rclrclrcl}
A+ &=& 4.33 & A &=& 4 & A- &=& 3.67 \\
B+ &=& 3.33 & B &=& 3 & B- &=& 2.67 \\
C+ &=& 2.33 & C &=& 2 & C- &=& 1.67 \\
D+ &=& 1.33 & D &=& 1 & D- &=& 0.67
\end{array}
$$

Part A

If your score is x, then your letter grade is

$$
f(x) = \max\left(\frac{3(x-49)}{34}, 0\right)
$$

The median score for the exam is 84 out of 100, which translates to a letter grade of 3.09 or B. The following table shows the letter grade for each possible score.

x	$f(x)$	x	$f(x)$	x	$f(x)$	x	$f(x)$	x	$f(x)$	x	$f(x)$
20	0.	35	0.	50	0.09	65	1.41	80	2.74	95	4.06
21	0.	36	0.	51	0.18	66	1.5	81	2.82	96	4.15
22	0.	37	0.	52	0.26	67	1.59	82	2.91	97	4.24
23	0.	38	0.	53	0.35	68	1.68	83	3.	98	4.32
24	0.	39	0.	54	0.44	69	1.76	84	3.09	99	4.41
25	0.	40	0.	55	0.53	70	1.85	85	3.18	100	4.5
26	0.	41	0.	56	0.62	71	1.94	86	3.26		
27	0.	42	0.	57	0.71	72	2.03	87	3.35		
28	0.	43	0.	58	0.79	73	2.12	88	3.44		
29	0.	44	0.	59	0.88	74	2.21	89	3.53		
30	0.	45	0.	60	0.97	75	2.29	90	3.62		
31	0.	46	0.	61	1.06	76	2.38	91	3.71		
32	0.	47	0.	62	1.15	77	2.47	92	3.79		
33	0.	48	0.	63	1.24	78	2.56	93	3.88		
34	0.	49	0.	64	1.32	79	2.65	94	3.97		

Part B

If your score is x, then your letter grade is

$$f(x) = \frac{3(x+7)}{58}$$

The median score for the exam is 54 out of 80, which translates to a letter grade of 3.16 or B. The following table shows the letter grade for each possible score.

x	$f(x)$	x	$f(x)$	x	$f(x)$	x	$f(x)$
0	0.36	20	1.4	40	2.43	60	3.47
1	0.41	21	1.45	41	2.48	61	3.52
2	0.47	22	1.5	42	2.53	62	3.57
3	0.52	23	1.55	43	2.59	63	3.62
4	0.57	24	1.6	44	2.64	64	3.67
5	0.62	25	1.66	45	2.69	65	3.72
6	0.67	26	1.71	46	2.74	66	3.78
7	0.72	27	1.76	47	2.79	67	3.83
8	0.78	28	1.81	48	2.84	68	3.88
9	0.83	29	1.86	49	2.9	69	3.93
10	0.88	30	1.91	50	2.95	70	3.98
11	0.93	31	1.97	51	3.	71	4.03
12	0.98	32	2.02	52	3.05	72	4.09
13	1.03	33	2.07	53	3.1	73	4.14
14	1.09	34	2.12	54	3.16	74	4.19
15	1.14	35	2.17	55	3.21	75	4.24
16	1.19	36	2.22	56	3.26	76	4.29
17	1.24	37	2.28	57	3.31	77	4.34
18	1.29	38	2.33	58	3.36	78	4.4
19	1.34	39	2.38	59	3.41	79	4.45
20	1.4	40	2.43	60	3.47	80	4.5