

INSTRUCTIONS FOR W. B. FORM 612-14

Section A.—TAKING THE OBSERVATIONS

1. *Reading the Thermometers.* Read the minimum temperature first, before either thermometer is touched. The minimum temperature is the reading of the right-hand end of the index. Next, slowly lower the maximum thermometer to the vertical position. The maximum temperature is the reading of the top of the mercury column. After both the minimum and maximum temperatures have been read, whirl the maximum thermometer until the reading is the same as the reading of the top of the alcohol column in the minimum thermometer. They should then agree within one degree. A greater difference should be reported in "Remarks" on the Form 612-14. Set the minimum thermometer by raising the bulb to allow the index to slide to the top of the alcohol column. Return both thermometers to the nearly horizontal position.

You may read your thermometers as many times a day as you wish but they must not be reset except at the time you have written at the heading of your form. Similarly, you may measure the precipitation as frequently as you wish but the rain gage must not be emptied except at your regular time of measurement.

2. *Measuring Liquid Precipitation.* Insert the measuring stick into the measuring tube. After two or three seconds, withdraw the stick. The amount of precipitation is the upper limit of the wet portion of the stick. If the measuring tube is full, it will measure 2.00 inches. Carefully empty the tube. Then pour some or all of the water from the overflow can into the tube and measure the amount poured. The total precipitation for the day will be the total of the individual measurements. Be sure the overflow can and tube are both empty after you have completed your measurement.

3. *Measuring Frozen Precipitation.* When snow, sleet, or hail is likely to occur, remove the funnel and measuring tube from the overflow can. Melt the snow, sleet, or hail by pouring a measured amount of warm water into the can. After the precipitation has all melted, measure the contents of the can the same as you measure liquid precipitation. Subtract the amount of water you poured into the can. The result is the total precipitation (melted) for the day.

a. *Measuring Snowfall.* Measure the depth of the new snow in several places and average the measurements.

b. *Measuring Snow and Ice on the Ground.* The snow or ice depth is the average of several measurements taken where the snow has not drifted.

Section B.—ENTERING THE DATA

1. *Filling in the Heading of the Form.*

- Write in the name of your station.
- Write in the name of your county and State.
- Write in the month and year.
- Write in the time that you usually read your thermometers and the time that you usually measure the precipitation. Show whether you use Eastern, Central, Mountain, or Pacific standard time or, if you are on daylight saving time, enter a "D" after Eastern, Central, Mountain, or Pacific, whichever is appropriate.

2. *Filling in the Columns of the Form.* Temperatures, rainfall, snowfall, and snow depths should be entered on the lines corresponding to the dates on which the measurements were made. For temperature readings below zero, use a minus sign (—) preceding the temperature values. The period of time during which precipitation occurred, and the weather types should be indicated on the lines corresponding to the actual dates of occurrence.

a. *Maximum Temperature Column.* Write in the temperature indicated by the top of the mercury column of the maximum thermometer after it has been slowly lowered to the vertical position. The maximum temperature should not be lower than the "temperature at observation" recorded on the previous day.

b. *Minimum Temperature Column.* Write in the temperature indicated by the right-hand end of the index in the minimum thermometer. It should not be higher than the "temperature at observation" on the previous day.

c. *Temperature at "Time of Observation" Column.* Write in the temperature shown at the top of the mercury column of the maximum thermometer after it has been whirled, but while it is still in the vertical position. It may also be obtained by reading the temperature indicated by the right-hand end of the index in the minimum thermometer. The "temperature at observation" will never be higher than the maximum temperature nor lower than the minimum for the same day.

d. *"Duration of Precipitation" Blocks.* Draw a straight line (—) through the hours when precipitation was known to have occurred, and a wavy line (~~~~) through the hours when precipitation probably occurred unobserved. These lines should be on the date-lines of occurrence.

e. *Rain, Melted Snow, etc., Column.* Write in the 24-hour amounts of rain, drizzle, or the water resulting from melted snow, sleet, hail, etc., which fell since the previous day's observation. This amount should be recorded on the date of measurement even though some or all of the precipitation may have fallen on the previous day after that day's observation. The amount should

be recorded to the nearest .01 inch. Write in "T" for a trace, and "O" when no precipitation occurred.

f. *Snow, Sleet, and Hail Column.* Write in the depth of the new snow, sleet, or hail which fell since the previous day's observation. Record the depth of the new snow to the nearest .1 inch. Write "T" for an amount too small to measure.

g. *Snow, Sleet, Hail, Ice on Ground Column.* Write in the depth of the snow or ice on the ground at the time of observation to the nearest inch. If the depth was less than half inch or if the snow was only in patches, write in "T" for trace.

h. *"Weather" Columns.* Indicate with the letter "X" the days on which fog, sleet, glass, thunder, hail, or damaging wind occurred.

i. *Time of Observation if Different from the Above.* The column headed "Time of Observation if Different from the Above" is to be used only when for some reason it has been impossible to take the observation at the proper time (or within one hour of the proper time). On such days the actual time of the observation should be entered in this column. In the event the time refers to the precipitation only, the time entry should be circled.

j. *Remarks.* In this column describe other important or unusual weather facts that occurred on the calendar day.

3. *Filling in the Bottom of the Form.* Sign your name and write in the name of Post Office, year station, and the month and year. List any supplies you need.

4. *Before Mailing your Form.*

- Inspect your report to see that the information needed at the top and bottom is entered completely.
- Check your daily temperature entries. All temperatures should have been entered on the dates you made the readings. The "temperature at observation" for any day should not be higher than the maximum temperature nor lower than the minimum temperature for that day nor for the following day.

c. Check your precipitation entries. Do you have an amount in the "rain, melted snow" column for every day on which some form of precipitation was measured? Remember, the precipitation may have fallen at any time after the previous measurement. There should be an entry in the "snowfall" column if snow, sleet, or hail fell since the previous observation. There should be an entry in the "snow-on-the-ground" column if snow, sleet, hail, or ice remains on the ground at the time of observation.

d. Always mail the original and one carbon copy of your report promptly after the end of the month to the Weather Records Processing Center unless you have other instructions.

Section C.—DEFINITIONS OF TERMS USED

1. *Maximum Temperature.* The highest temperature during the 24-hour period ending at the time of observation.

2. *Minimum Temperature.* The lowest temperature during the 24-hour period ending at the time of observation.

3. *Temperature at Observation.* The temperature at the time the thermometers are read.

4. *Duration of Precipitation.* The time during which rain, snow, or other form of precipitation was occurring.

5. *Some Liquid Forms of Precipitation.*

a. *Rain.* Precipitation which reaches the ground as drops of water.

b. *Drizzle.* Precipitation which falls from low clouds and as very small and numerous droplets which seem to float in the air and which cause poor visibility.

6. *Some Frozen Forms of Precipitation.*

a. *Snow.* Precipitation which falls as flakes or ice crystals.

b. *Sleet.* Precipitation which falls as hard grains of ice. They may be white or transparent. They bounce but seldom burst when they fall on a hard surface.

c. *Hail.* Precipitation which falls as balls or irregular lumps of ice. They range in size from smaller than peas to larger than baseballs. They are associated with thunderstorm activity.

d. *Snow Pellets.* Snow that falls as round or conical white grains. They are crisp and easily compressible. They bounce and often burst when they fall on hard ground.

e. *Snow Grains.* Snow grains resemble snow pellets but are much smaller. They do not noticeably bounce and burst when they fall on hard ground.

f. *Glaze.* A coating of smooth ice formed by the freezing of rain or drizzle on outdoor objects.

g. *Rime.* A coating of white granular ice formed on outdoor objects by the freezing of fog particles or fine drizzle.

h. *Fog.* Very small water droplets that float in the air and reduce visibility.

8. *Thunder.* Thunder heard at your station whether accompanied by precipitation or not.

9. *Damaging Winds.* Strong winds that damage vegetation, buildings, or other property.

Complete instructions for cooperative observers are in *Instructions for Climatological Observers, Circular B.*

RECORD OF CLIMATOLOGICAL OBSERVATIONS

Station Your Station
 County Your County
 State Your State

Month Sample
 Time of observation (local time) if once daily 6 P.
 Standard time in use E.

TEMPERATURE °F		PRECIPITATION												WEATHER (CALENDAR DAY)										Important weather conditions not included in 'Weather' block, remarks, etc.	
24 hrs. ending at observation		Draw a straight line (—) through hours precipitation was observed, and a wavy line (~~~~) through hours precip. probably occurred unobserved.												Mark 'X' for all types occurring each day										Time of Onset if different from the above	
Max.	Min.	Rain, Melted snow, etc. (ins. & hundredths)												Snow, Sleet, Hail, Ice (ins. & hundredths)											
93	61	82																							
101	57	86																							
97	67	82																							
100	71	87																							
88	63	73																							
84	59	75																							
81	49	72																							
79	53	71																							
74	47	64																							
69	38	60																							
63	34	55																							
58	46	54																							
63	50	57																							
59	45	53																							
54	43	45																							
49	26	32																							
34	15	19																							
23	0	5																							
8	-9	-5																							
-4	-18	-8																							
0	-10	0																							
19	0	11																							
28	8	25																							
32	22	30																							
44	27	41																							
47	26	43																							
53	34	46																							
58	38	49																							
52	33	35																							
49	28	43																							
57	42	51																							
Sum																									
Aug																									
Ex-tended																									

Observer <u>Your name</u>		Post Office <u></u>		Station <u>Your station</u>		Month <u>Sample</u>		Year <u>1956</u>	
Check ☒ when additional sheet is used for remarks		List forms or supplies needed		Carbon paper, envelope & continuation sheet					

Handwritten weather observations on a grid. Includes temperature, precipitation, and other meteorological data for various dates and times.

U.S. FORM 51-14
U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station BAR HARBOR
County HANCOCK
State MAINE
Time of observation (local time) if once daily 5:00 PM
Standard time 18 63

U.S. FORM 51-14
U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station BAR HARBOR
County HANCOCK
State MAINE
Time of observation (local time) if once daily 5:00 PM
Standard time 18 63
Handwritten weather observations on a grid. Includes temperature, precipitation, and other meteorological data for various dates and times.

Handwritten weather observations on a grid. Includes temperature readings (e.g., 54, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100) and various weather conditions (e.g., Clear, Partly Cloudy, Overcast, Rain, Snow, Fog, Thunder, Hail, Sleet, Ice, Wind, Clouds, etc.).

RECORD OF CLIMATOLOGICAL OBSERVATIONS
Station PAR HARBOR
County HAWKESK
State MAINE
Month JULY 1963
Standard time in use EST

TEMPERATURE °		PRECIPITATION		WEATHER (CALENDAR DAY)		Important weather conditions not included in 'Weather' block; remarks, etc.	
24 hrs ending at observation	At obs.	24-hr. amounts	At obs.	Mark 'X' for all types occurring each day	Time of obs.	from the above	
Max. Min.	At obs.	Rain, Melted snow, etc. (in. & hundredths)	Snow, Sleet, Hail, Ice on ground (inches)	Fog, Glaze, Thunder, Hail, Sleet, Glaze	Time of obs.		
1 78 54 68	78	T	0.6	X		PT Cloudy	
2 71 50 59	71	0.4	0.4	X		PT Cloudy	
3 83 57 71	83	0.2	0.2			PT Cloudy	
4 71 54 63	71	0.3	0.3			PT Cloudy	
5 73 56 67	73	0.3	0.3			PT Cloudy	
6 69 53 68	69	0.3	0.3			PT Cloudy	
7 71 52 67	71	0.3	0.3			PT Cloudy	
8 68 53 55	68	0.3	0.3			PT Cloudy	
9 71 53 66	71	0.3	0.3			PT Cloudy	
10 68 45 69	68	0.3	0.3			PT Cloudy	
11 76 56 74	76	0.3	0.3			PT Cloudy	
12 79 52 76	79	0.3	0.3			PT Cloudy	
13 77 55 75	77	0.3	0.3			PT Cloudy	
14 76 55 63	76	0.3	0.3			PT Cloudy	
15 76 56 68	76	0.3	0.3			PT Cloudy	
16 79 64 76	79	0.3	0.3			PT Cloudy	
17 80 63 79	80	0.3	0.3			PT Cloudy	
18 78 57 70	78	0.3	0.3			PT Cloudy	
19 86 59 82	86	0.3	0.3			PT Cloudy	
20 82 61 67	82	0.3	0.3			PT Cloudy	
21 84 58 69	84	0.3	0.3			PT Cloudy	
22 70 55 66	70	0.3	0.3			PT Cloudy	
23 72 56 71	72	0.3	0.3			PT Cloudy	
24 73 53 72	73	0.3	0.3			PT Cloudy	
25 82 61 71	82	0.3	0.3			PT Cloudy	
26 94 62 89	94	0.3	0.3			PT Cloudy	
27 92 73 86	92	0.3	0.3			PT Cloudy	
28 90 72 88	90	0.3	0.3			PT Cloudy	
29 88 59 75	88	0.3	0.3			PT Cloudy	
30 75 63 70	75	0.3	0.3			PT Cloudy	
31 77 59 72	77	0.3	0.3			PT Cloudy	
Sum 2400	1789	2.46	2.46			Clear - PT Cloudy	
Avg. 72.9	58.3						
Ex-Item							

1. **GENERAL INFORMATION**
 a. **NAME** _____
 b. **DATE** _____
 c. **TIME** _____
 d. **LOCATION** _____
 e. **WEATHER** _____
 f. **MOON** _____
 g. **WIND** _____
 h. **SEA** _____
 i. **SKY** _____
 j. **TEMPERATURE** _____
 k. **HUMIDITY** _____
 l. **WIND DIRECTION** _____
 m. **WIND VELOCITY** _____
 n. **SEA DIRECTION** _____
 o. **SEA VELOCITY** _____
 p. **SKY DIRECTION** _____
 q. **SKY VELOCITY** _____
 r. **TEMPERATURE** _____
 s. **HUMIDITY** _____
 t. **WIND DIRECTION** _____
 u. **WIND VELOCITY** _____
 v. **SEA DIRECTION** _____
 w. **SEA VELOCITY** _____
 x. **SKY DIRECTION** _____
 y. **SKY VELOCITY** _____
 z. **TEMPERATURE** _____
 aa. **HUMIDITY** _____
 ab. **WIND DIRECTION** _____
 ac. **WIND VELOCITY** _____
 ad. **SEA DIRECTION** _____
 ae. **SEA VELOCITY** _____
 af. **SKY DIRECTION** _____
 ag. **SKY VELOCITY** _____
 ah. **TEMPERATURE** _____
 ai. **HUMIDITY** _____
 aj. **WIND DIRECTION** _____
 ak. **WIND VELOCITY** _____
 al. **SEA DIRECTION** _____
 am. **SEA VELOCITY** _____
 an. **SKY DIRECTION** _____
 ao. **SKY VELOCITY** _____
 ap. **TEMPERATURE** _____
 aq. **HUMIDITY** _____
 ar. **WIND DIRECTION** _____
 as. **WIND VELOCITY** _____
 at. **SEA DIRECTION** _____
 au. **SEA VELOCITY** _____
 av. **SKY DIRECTION** _____
 aw. **SKY VELOCITY** _____
 ax. **TEMPERATURE** _____
 ay. **HUMIDITY** _____
 az. **WIND DIRECTION** _____
 ba. **WIND VELOCITY** _____
 bb. **SEA DIRECTION** _____
 bc. **SEA VELOCITY** _____
 bd. **SKY DIRECTION** _____
 be. **SKY VELOCITY** _____
 bf. **TEMPERATURE** _____
 bg. **HUMIDITY** _____
 bh. **WIND DIRECTION** _____
 bi. **WIND VELOCITY** _____
 bj. **SEA DIRECTION** _____
 bk. **SEA VELOCITY** _____
 bl. **SKY DIRECTION** _____
 bm. **SKY VELOCITY** _____
 bn. **TEMPERATURE** _____
 bo. **HUMIDITY** _____
 bp. **WIND DIRECTION** _____
 bq. **WIND VELOCITY** _____
 br. **SEA DIRECTION** _____
 bs. **SEA VELOCITY** _____
 bt. **SKY DIRECTION** _____
 bu. **SKY VELOCITY** _____
 bv. **TEMPERATURE** _____
 bw. **HUMIDITY** _____
 bx. **WIND DIRECTION** _____
 by. **WIND VELOCITY** _____
 bz. **SEA DIRECTION** _____
 ca. **SEA VELOCITY** _____
 cb. **SKY DIRECTION** _____
 cc. **SKY VELOCITY** _____
 cd. **TEMPERATURE** _____
 ce. **HUMIDITY** _____
 cf. **WIND DIRECTION** _____
 cg. **WIND VELOCITY** _____
 ch. **SEA DIRECTION** _____
 ci. **SEA VELOCITY** _____
 cj. **SKY DIRECTION** _____
 ck. **SKY VELOCITY** _____
 cl. **TEMPERATURE** _____
 cm. **HUMIDITY** _____
 cn. **WIND DIRECTION** _____
 co. **WIND VELOCITY** _____
 cp. **SEA DIRECTION** _____
 cq. **SEA VELOCITY** _____
 cr. **SKY DIRECTION** _____
 cs. **SKY VELOCITY** _____
 ct. **TEMPERATURE** _____
 cu. **HUMIDITY** _____
 cv. **WIND DIRECTION** _____
 cw. **WIND VELOCITY** _____
 cx. **SEA DIRECTION** _____
 cy. **SEA VELOCITY** _____
 cz. **SKY DIRECTION** _____
 da. **SKY VELOCITY** _____
 db. **TEMPERATURE** _____
 dc. **HUMIDITY** _____
 dd. **WIND DIRECTION** _____
 de. **WIND VELOCITY** _____
 df. **SEA DIRECTION** _____
 dg. **SEA VELOCITY** _____
 dh. **SKY DIRECTION** _____
 di. **SKY VELOCITY** _____
 dj. **TEMPERATURE** _____
 dk. **HUMIDITY** _____
 dl. **WIND DIRECTION** _____
 dm. **WIND VELOCITY** _____
 dn. **SEA DIRECTION** _____
 do. **SEA VELOCITY** _____
 dp. **SKY DIRECTION** _____
 dq. **SKY VELOCITY** _____
 dr. **TEMPERATURE** _____
 ds. **HUMIDITY** _____
 dt. **WIND DIRECTION** _____
 du. **WIND VELOCITY** _____
 dv. **SEA DIRECTION** _____
 dw. **SEA VELOCITY** _____
 dx. **SKY DIRECTION** _____
 dy. **SKY VELOCITY** _____
 dz. **TEMPERATURE** _____
 ea. **HUMIDITY** _____
 eb. **WIND DIRECTION** _____
 ec. **WIND VELOCITY** _____
 ed. **SEA DIRECTION** _____
 ee. **SEA VELOCITY** _____
 ef. **SKY DIRECTION** _____
 eg. **SKY VELOCITY** _____
 eh. **TEMPERATURE** _____
 ei. **HUMIDITY** _____
 ej. **WIND DIRECTION** _____
 ek. **WIND VELOCITY** _____
 el. **SEA DIRECTION** _____
 em. **SEA VELOCITY** _____
 en. **SKY DIRECTION** _____
 eo. **SKY VELOCITY** _____
 ep. **TEMPERATURE** _____
 eq. **HUMIDITY** _____
 er. **WIND DIRECTION** _____
 es. **WIND VELOCITY** _____
 eu. **SEA DIRECTION** _____
 ev. **SEA VELOCITY** _____
 ew. **SKY DIRECTION** _____
 ex. **SKY VELOCITY** _____
 ey. **TEMPERATURE** _____
 ez. **HUMIDITY** _____
 fa. **WIND DIRECTION** _____
 fb. **WIND VELOCITY** _____
 fc. **SEA DIRECTION** _____
 fd. **SEA VELOCITY** _____
 fe. **SKY DIRECTION** _____
 ff. **SKY VELOCITY** _____
 fg. **TEMPERATURE** _____
 fh. **HUMIDITY** _____
 fi. **WIND DIRECTION** _____
 fj. **WIND VELOCITY** _____
 fk. **SEA DIRECTION** _____
 fl. **SEA VELOCITY** _____
 fm. **SKY DIRECTION** _____
 fn. **SKY VELOCITY** _____
 fo. **TEMPERATURE** _____
 fp. **HUMIDITY** _____
 fq. **WIND DIRECTION** _____
 fr. **WIND VELOCITY** _____
 fs. **SEA DIRECTION** _____
 ft. **SEA VELOCITY** _____
 fu. **SKY DIRECTION** _____
 fv. **SKY VELOCITY** _____
 fw. **TEMPERATURE** _____
 fx. **HUMIDITY** _____
 fy. **WIND DIRECTION** _____
 fz. **WIND VELOCITY** _____
 ga. **SEA DIRECTION** _____
 gb. **SEA VELOCITY** _____
 gc. **SKY DIRECTION** _____
 gd. **SKY VELOCITY** _____
 ge. **TEMPERATURE** _____
 gf. **HUMIDITY** _____
 gg. **WIND DIRECTION** _____
 gh. **WIND VELOCITY** _____
 gi. **SEA DIRECTION** _____
 gj. **SEA VELOCITY** _____
 gk. **SKY DIRECTION** _____
 gl. **SKY VELOCITY** _____
 gm. **TEMPERATURE** _____
 gn. **HUMIDITY** _____
 go. **WIND DIRECTION** _____
 gp. **WIND VELOCITY** _____
 gq. **SEA DIRECTION** _____
 gr. **SEA VELOCITY** _____
 gs. **SKY DIRECTION** _____
 gt. **SKY VELOCITY** _____
 gu. **TEMPERATURE** _____
 gv. **HUMIDITY** _____
 gw. **WIND DIRECTION** _____
 gx. **WIND VELOCITY** _____
 gy. **SEA DIRECTION** _____
 gz. **SEA VELOCITY** _____
 ha. **SKY DIRECTION** _____
 hb. **SKY VELOCITY** _____
 hc. **TEMPERATURE** _____
 hd. **HUMIDITY** _____
 he. **WIND DIRECTION** _____
 hf. **WIND VELOCITY** _____
 hg. **SEA DIRECTION** _____
 hh. **SEA VELOCITY** _____
 hi. **SKY DIRECTION** _____
 hj. **SKY VELOCITY** _____
 hk. **TEMPERATURE** _____
 hl. **HUMIDITY** _____
 hm. **WIND DIRECTION** _____
 hn. **WIND VELOCITY** _____
 ho. **SEA DIRECTION** _____
 hp. **SEA VELOCITY** _____
 hq. **SKY DIRECTION** _____
 hr. **SKY VELOCITY** _____
 hs. **TEMPERATURE** _____
 ht. **HUMIDITY** _____
 hu. **WIND DIRECTION** _____
 hv. **WIND VELOCITY** _____
 hw. **SEA DIRECTION** _____
 hx. **SEA VELOCITY** _____
 hy. **SKY DIRECTION** _____
 hz.

Station 2000 County AK

Record of Climatological Observations

Time of observation (local time) if once daily 0600

Month SEPTEMBER Year 1967

[illegible]

17-0371-32

[illegible]

RECORD OF CLIMATOLOGICAL OBSERVATIONS

Station BAR HARBOR County HANCOCK State MAINE

Time of observation (local time) if once daily _____

if at different times, temperature _____

OCTOBER 1963

TEMPERATURE °F		PRECIPITATION												WIND		WEATHER		TIME OF OBS.		REMARKS			
Date	24 hrs. ending at observation	Max.	Min.	24-hr. amounts												Wind	Direction	Force	Time of Day	Time of Night	Remarks		
				Draw a straight line (—) through hours precipitation was observed, and a wavy line (~~~~) through hours precip. probably occurred unobserved.												Snow, Sleet, Hail, Ice on ground (inches)		Thunder, Hail, Glaze, Fog		If different from above			
				A.M. P.M.												Snow, Sleet, Hail, Ice on ground (inches)		Thunder, Hail, Glaze, Fog		If different from above			
				1 2 3 4 5 6 7 8 9 10 11												Snow, Sleet, Hail, Ice on ground (inches)		Thunder, Hail, Glaze, Fog		If different from above			
1	56	39	52																				
2	65	46	56																				
3	67	52	62																				
4	64	49	49																				
5	60	37	57																				
6	72	54	66																				
7	78	51	73																				
8	78	54	59																				
9	60	37	47																				
10	53	26	49																				
11	64	40	58																				
12	59	39	43																				
13	54	39	51																				
14	62	35	61																				
15	73	51	68																				
16	78	62	75																				
17	72	49	53																				
18	63	39	59																				
19	78	50	73																				
20	73	46	64																				
21	68	52	54																				
22	54	34	45																				
23	58	41	55																				
24	72	52	66																				
25	67	43	59																				
26	67	43	56																				
27	76	45	69																				
28	69	51	53																				
29	54	34	40																				
30	40	38	38																				
31	50	35	50																				
Sum	1949	1360	339	Sum																			
Avg	64	42.9	54.2	Avg																			
X -				X -																			

