Scatter plot Calculator practice

| Years since <br> 1990 | Average Weekly Work <br> hours in U.S |
| :--- | :--- |
| 0 | 34.5 |
| 1 | 34.3 |
| 2 | 34.4 |
| 3 | 34.5 |
| 4 | 34.7 |
| 5 | 34.5 |
| 6 | 34.4 |
| 7 | 34.6 |
| 8 | 34.6 |
| 9 | 34.5 |

Enter the data in your calculator.

1. Look at the scatter plot, what type of correlation do you see?
2. Use your calculator to determine the line of best fit, on your paper round to the nearest hundredth .
3. Cut and paste your line of best fit into the $y=$. Use your table to predict the average weekly work hours for 15 years after 1990.
4. Use your table to determine how many years after 1990 we would expect to see the average work week hours to reach 35.39.

| Minutes spent <br> jogging | Miles per hour |
| :--- | :--- |
| 5 | 10 |
| 10 | 9 |
| 15 | 5 |
| 20 | 5 |
| 25 | 6 |

Enter the data in your calculator.
5. Look at the scatter plot, what type of correlation do you see?
6. Use your calculator to determine the line of best fit, on your paper round to the nearest hundredth . 7, Cut and paste your line of best fit into the $\mathrm{y}=$. Use your table to predict the miles per hour for 40 minutes spent jogging.
8. Use your table to determine how many minutes you would have to spend jogging to real a miles per hour pace of 5.08 .

| Year | Students per <br> computer |
| :--- | :--- |
| 1990 | 22 |
| 1992 | 18 |
| 1994 | 14 |
| 1996 | 10 |
| 1998 | 6.1 |
| 2000 | 5.4 |
| 2002 | 5 |
| 2004 | 4.8 |
| 2006 | 4.4 |
| 2008 | 3 |
| 2010 | 3.9 |
| 2012 | 2.9 |

Enter data into your calculator, using years since 1990 as your $x$ values
( $0,2,4 . .$. )
9. Look at the scatter plot, what type of correlation do you see?
10. Use your calculator to determine the line of best fit, on your paper round to the nearest hundredth .
11. Cut and paste your line of best fit into the $y=$. Use your table to predict the students per computer in 2009 (round to hundredths)
12. Use your table to determine how many years after 1990 we would expect to see student per computer ratio to reach .49 ?

| Years since 1995 | Hourly Wage |
| :--- | :--- |
| 0 | $\$ 11.50$ |
| 1 | $\$ 11.77$ |
| 2 | $\$ 12.00$ |
| 3 | $\$ 12.25$ |
| 4 | $\$ 12.80$ |
| 5 | $\$ 13.30$ |
| 6 | $\$ 14.10$ |

Enter the data in your calculator.
13. Look at the scatter plot, what type of correlation do you see?
14. Use your calculator to determine the line of best fit, on your paper round to the nearest hundredth .
15. Cut and paste your line of best fit into the $y=$. Use your table to predict the hourly wage for 2014.
16. Use your table to determine what year we would expect the hourly wage to reach \$35.21?

| Minutes spent <br> working out | Calories burned |
| :--- | :--- |
| 10 | 100 |
| 15 | 120 |
| 20 | 146 |
| 22 | 148 |
| 25 | 176 |
| 29 | 210 |
| 32 | 290 |
| 65 | 475 |

Enter the data in your calculator.
17. Look at the scatter plot, what type of correlation do you see?
18. Use your calculator to determine the line of best fit, on your paper round to the nearest hundredth.
19. Cut and paste your line of best fit into the $y=$. Use your table to predict the calories burned after 40 minutes of working out.
20. Use your table to determine how many minutes it would take to burn about 400 calories.

| NFL week | Panther points <br> scored |
| :--- | :--- |
| 1 | 7 |
| 2 | 23 |
| 3 | 38 |
| 5 | 6 |
| 6 | 35 |
| 7 | 30 |
| 8 | 31 |
| 9 | 34 |
| 10 | 10 |
| 11 | 24 |
| 12 | 20 |
| 13 | 27 |
| 14 | 13 |
| 15 | 30 |
| 16 | 17 |
| 17 | 21 |

Enter the data in your calculator. 21. Use your calculator to determine the line of best fit, on your paper round to the nearest hundredth . 22. Cut and paste your line of best fit into the $y=$. Use your table to predict points the Panthers will score in week 18 , against the 49ers.
23. Use one of the 6 data sets and explain a scenario where the information collected would benefit someone. How would we use this in the "real world"

