

Wow, this vortex stuff is making winter come awfully early this year



There have been some amazing swings in temperatures this month sometimes in only a 24-hour span of time.

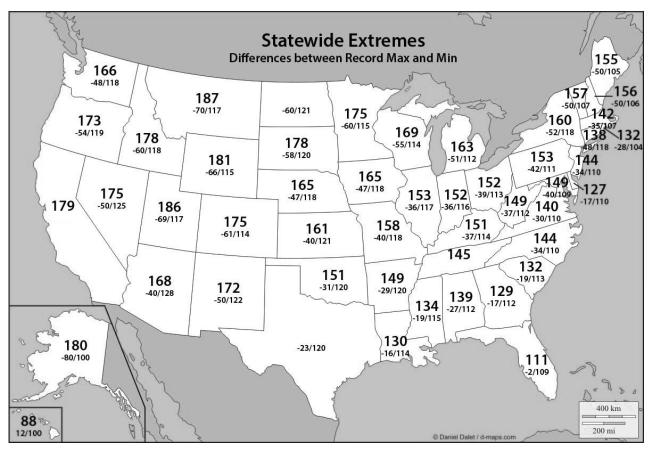
Last week, in Denver, the temperature was a balmy 71 degrees Fahrenheit on Sunday afternoon and then dropped to -14<sup>o</sup> F the next Thursday morning. That was pretty fast and a long way for the temperature to drop. Sounds like math!

- 1. In those 3 days how much did the temperature fall? Please show your work and explain what you did so that I can understand how to measure from 71° F to -14° F.
- 2. What is the subtraction process that you could use to figure out the difference between 71 and -14 and have your answer come out negative so that you could conclude that the temperature had fallen (If you hadn't noticed that it was getting colder). For instance, do you subtract the early temperature from the late temperature or vise-versa? Do you subtract the high temperature from the low temperature? Please explain.
- 3. In Valentine, Nebraska, it was -18<sup>°</sup> F at 7:00am in the morning. That night the temperature was up to 37<sup>°</sup> F. How much had the temperature risen? Show your work.
- The largest recorded temperature change in one place over a 24-hour period occurred on January 15, 1972 in Loma, Montana, when the temperature rose from −54 to 49 <sup>0</sup> F. Show your work and describe this change.

The largest 2-minute temperature change of 49 °F occurred in Spearfish, South Dakota, a rise from -4 to 45 °F. Wow!

I found this cool map that shows the ranges of high to low temperatures in each of the states in the U.S.

As a puzzle for you, I've whited-out some of the numbers.



- 5. The map shows that Texas had a record low temperature of -23<sup>0</sup> F and a record high temperature of 120<sup>0</sup> F. What was the temperature range that I whited out?
- 6. I also whited out North Dakota's range of temperatures. What should that be?
- 7. California had a temperature range of 179<sup>0</sup> F. What could California's high and low temperatures have been?
- 8. Take a guess on Tennessee's high and low temperatures and show your work.
- 9. In your state or town, what are the coldest and warmest temperatures that anyone you know can remember?
- 10. Judging from its temperatures and temperature range, which state would you like to live in?

Source: <a href="http://en.wikipedia.org/wiki/United\_States\_temperature\_extremes">http://en.wikipedia.org/wiki/United\_States\_temperature\_extremes</a> <a href="http://gweather.com/climate/extremes\_us.htm">http://gweather.com/climate/extremes\_us.htm</a>

Mr. Petto encourages you to Keep Warm! (dress in layers)