# Eighth Grade Iditarod Math Problems 

1. 

| Team Name | \# of dogs on teams @ the finish in Nome |
| :---: | :---: |
| King | 11 |
| Neff | 8 |
| Jonrowe | 13 |
| Scdoris | 6 |
| Seavey | 13 |
| Baker | 7 |
| Redington | 9 |
| Gould | 13 |
| Buser | $?$ |

The table shows nine teams that finished the race with the corresponding number of dogs on each team. Given that the mean is 10 , find the number of dogs on the Buser team at the finish as well as the median and the mode.
2. DeeDee Jonrowe left Iditarod checkpoint March 11 at 6:12 a.m. and arrived at Shageluk (say SHAG-a-luck) checkpoint March 11 at 2:20 p.m. Lance Mackey left Iditarod checkpoint at 8 a.m. and arrived at Shageluk checkpoint at 3:40 p.m. It's 65 miles between these checkpoints. What is each musher's average speed per hour between Iditarod and Shageluk checkpoints?
3. 102 mushers are racing the 2006 Iditarod Trail Sled Dog Race ${ }^{\text {TM }}$ as of January 2006. Nineteen mushers are women. In the 2005 race, sixteen women raced in a field of 79 mushers. What percent of each race are female mushers? What was the percentage of increase or decrease in women mushers between the 2005 and 2006 races?
4. The race restart is 2 p.m. on the first Sunday of March. If there are 79 teams and teams leave every 2 minutes beginning at 2 p.m., what time will the last team leave?
5. Libby Riddles, the first woman to win the Iditarod, has won the race once. Susan Butcher has won it the same number of times as Martin Buser has. Robert Sorlie has won one more race than Libby and two less than Martin. How many races has Susan won?
6. Temperatures on four race days were as follows: - 15 degrees F on Day $3 ;-39$ degrees F on Day 4; -17 degrees F on Day 5; and 4 degrees F on Day 6. What is the greatest difference in temperatures on these days? What is the average temperature of these race days?
7. Iditarod Trail Race ${ }^{\mathrm{TM}}$ rules require each musher to carry 8 booties in the sled per dog on the team. If 32 teams start with 16 dogs each, and 23 teams start with 14 dogs each, what is the total number of booties in sleds at the race start?
8. Mitch Seavey's race time was 9 days, 19 hours, and 20 minutes. Aliy Zirkle's race time was 10 days, 1 hour, and 46 minutes. What was the time difference in their race records?
9. Sled dogs wear booties on their paws for protection from snow, ice, and rough terrain. Jeff King starts with 16 dogs on his team and changes all the booties every 25 miles. It's 413 miles from Anchorage to McGrath checkpoint. How many booties did Jeff uses between Anchorage and McGrath? Round any decimals to the nearest whole number.
10.

Checkpoints
Distance between Checkpoints in Miles

| Ophir to Cripple | 59 |
| :--- | :---: |
| Cripple to Ruby | 112 |
| Ruby to Galena |  |
| Galena to Nulato | 52 |
| Nulato to Kaltag |  |
| Kaltag to Unalakleet (YOU-na-la-kleet) | 90 |
| Unalakleet to Shaktoolik | 42 |

The distance between Ophir and Shaktoolik is 449 miles. It's 10 miles more between Ruby and Galena than from Nulato to Kaltag. Find the missing distances in the chart above.

