## Sixth Grade Iditarod Math Problems

1. Ramey Smyth \& DeeDee Jonrowe have a total of 162 dogs at their kennels. Jessie Royer has 61 dogs at her kennel. Jessie has 4 less dogs than Ramey has. How many dogs does Ramey have? How many dogs does DeeDee have?

| Jessie-61 dogs $\quad$ Ramey $61+4=65$ dogs $\quad$ DeeDee $162-65=97$ dogs |
| :--- | :--- | :--- |

2. Robert Sorlie won the 2005 Iditarod with a time of 9 days, 18 hours and 39 minutes. Doug Swingley finished in $14^{\text {th }}$ place with a time of 10 days, 2 hours and 59 minutes. How much earlier did Sorlie arrive at the finish than Swingley?

10 d 2 hr .59 min.
$-9 \mathrm{~d} 18 \mathrm{hr} .39 \mathrm{~min}$. 8 hr .20 min .
3. The race rules require each musher to carry 8 booties in the sled bag per dog on the team. 103 mushers registered for the 2006 race (as of January 1, 2006). If each musher starts with 16 dogs, how many booties does each musher have in the sled?

| 16 |
| :--- |
| $\underline{\mathrm{x} 8}$ |
| 128 booties |

4. Mushers are required to ship at least 60 pounds of food and gear to 18 checkpoints on the trail. How many pounds of food and gear must they ship?

| 18 |
| ---: |
| $\times \quad 60$ |
| 1080 pounds |

5. Of the 102 total mushers entered in the 2006 race (as of 1-1-06), 76 are veteran mushers (have raced in this race before), 19 are women, and 83 are men. How many rookie mushers are there? (Rookie mushers haven't raced in this race). Write a raatio representing the number of rookies to the total number of mushers. Reduce it to lowest terms.

| 102 | $26 / 102=13 / 51$ |
| :--- | :--- |
| $\frac{-76}{26}$ rookies |  |

6. The Bootie Brigade is a group of volunteers who sew booties for the mushers to use. Each musher uses 1500-2500 booties in the race to protect the dogs' paws. If booties cost 95 cents each and musher Jeff King used 1940 booties, how much did he spend on booties?

$$
\begin{array}{r}
1940 \\
\mathrm{x} .95 \\
9200 \\
\underline{18160} \\
\$ 1908.00 \\
\hline
\end{array}
$$

7. The Iditarod Trail Sled Dog Race ${ }^{\mathrm{TM}}$ is officially 1049 miles long. Martin Buser finished in $13^{\text {th }}$ place in 2005 despite accidentally amputating his finger with a table saw just days before the race. His race time was 10 days, 2 hours, and 32 minutes. Using only the days, figure Martin's average miles per day.

## 1049 divided by $10=104.9$ miles per day

8. 2005 race winner Robert Sorlie of Norway finished with a time of 9 days, 18 hours, 39 minutes and 31 seconds. Ed Iten (say EAT-en) finished in 9 days, 19 hours, 13 minutes and 33 seconds. How much more time did Ed take to finish the race than Robert?

9 d 19 hr. 13 min .33 sec .
$-9 \mathrm{~d} 18 \mathrm{hr} .39 \mathrm{~min} .31 \mathrm{sec}$.
34 min .2 sec .
9. Of 102 mushers in the 2006 race, 19 are women. In the 2005 race, 16 women raced in a field of 79 mushers. Write a ratio of the number of women to the total number of mushers for each year.

$$
16 / 79=20.2 \% \text { are female mushers }
$$

10. In 2005 DeeDee Jonrowe left Iditarod checkpoint March 11 at 6:12 a.m. and arrived at Shageluk (say SHAG-uh-luck) checkpoint, 65 miles away, March 11 at 2:20 p.m. Lance Mackey left Iditarod checkpoint March 11 at 8 a.m. and arrived at Shageluk checkpoint at 3:40 p.m. Which musher took less time to travel from Iditarod to Shageluk?

$$
\text { DeeDee } 8 \mathrm{hr} .8 \mathrm{~min} . \quad \text { *** Lance } 7 \mathrm{hr} .40 \mathrm{~min} .{ }^{* * *}
$$

