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Subject: Problem of the week from the MathCounts website.... mathcounts is a national program for middle school students sponsored by the national engineering society thought the problem was a good one for us

MATHCOUNTS

End Of Summer Pool Party

August 27, 2007 -

A town in South Dakota decides to have an “End of the Summer” pool party and invites all of the households in the town that have school aged children.

27 households are invited to the party and the ratio of 5-person households to 4-person households to 3-person households to 2-person households invited is 1:4:3:1, respectively. (The invite list did not include households of any other sizes.) How many people from households with less than 4 people are invited to the party?

On the day of the pool party 75% of the invited people attend. If 1 out of every 12 of the attendees brings one uninvited guest each, how many people attend the pool party?

The party planning committee planned for only 70 people to attend, and it purchased enough supplies to feed each attendee two $\frac{1}{4}$ -lb hamburgers. Because they underestimated the number of attendees, , how many additional pounds of meat must be purchased so that everyone receives two $\frac{1}{4}$ -lb hamburgers?

At the beginning of the pool party the rectangular pool, which is 50 ft by 25 ft with an average depth of 5 ft, was completely filled with water. By the end of the day the water level had lowered by 6 inches. By what percent had the amount of water in the pool decreased over the course of the day?

The solutions to this these problems will be posted on September 3rd, 2007.

This web site is best viewed using Internet Explorer version 6.0 or newer.

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