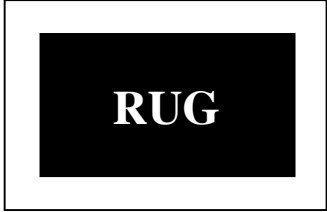


2005 Washington State Math Championship

Unless a particular problem directs otherwise, give an exact answer or one rounded to the nearest thousandth.

Probability - Grade 5

1. What is the probability of NOT choosing a prime number from the first 25 integers?
2. How many ways can 5 true/false questions be answered?
3. *Spilled Ice Cream Problem* Chris Cross is 13 months old, and is at the prime age to learn to walk. He zigzags across the 12 by 15 foot room shown in the figure, eventually falling down. The ice cream cone he is carrying spills either on the 9 by 12 foot rug or on the floor around the rug. What is the probability the ice cream will land on the floor?

4. A single card is drawn from a deck of cards. What is the probability it is a face card? Write your answer as a reduced fraction.
5. A pizza establishment offers 12 kinds of meat topping (pepperoni, sausage, etc.) and 5 kinds of vegetable toppings (onions, peppers, etc). How many different two topping pizzas can be made using a combination of 1 meat topping and 1 vegetable topping?
6. Find the **mean** ages in weeks of puppies at an animal shelter. The ages are 4, 7, 6, 13, 15, 13, 8, 11, 11, 17, 5, 6. Give your answer rounded to the nearest tenth of a week.
7. Find the **median** ages in weeks of puppies at an animal shelter. The ages are 4, 7, 6, 13, 15, 13, 8, 11, 11, 17, 5, 6. Round your answer to the nearest tenth of a week.
8. Find the **range** for the ages in weeks of puppies at an animal shelter. The ages are 4, 7, 6, 13, 15, 13, 8, 11, 11, 17, 5, 6
9. Triangles are usually named by placing a **different** letter at each vertex. In how many different ways could a given triangle be named?
10. Charlie brown has 13 socks in his drawer, 7 blue and 6 green. He selects 5 socks at random. What is the probability he gets 2 blue and 1 green?