Use the triangle and identities on the note sheet to find which letters in the word you are looking for. For example, the first question starts with cot(news), cot is adjacent over opposite which corresponds to 4 over 3 on the triangle and thus the letters s and w in the word news. Continuing in the manner gives you the word list below. Each word is one of the gifts in the Christmas carol "12 Days of Christmas" and corresponds to a numbered day. Use the number of the word in the formula provided to come up with one number for each question.

1. Swans x = 7 x = 142. Rings = 5 3. Pipers x = 1 = 11 x = 11 x = 1234. Swans x = 7 x = 145. Rings = 5 6. Geese x = 6 x = 187. Birds = 4 8. Maids = 8 9. Rings x = 5 x = 1510. Drummers = 12 11. Ladies = 9 12. Birds = 4 13. Partridge = 1 14. Rings x = 5x = 5x = 25

Using alpha-numeric substitution of these numbers the final answer is "New Nerd Holiday."