

Problem of the Week

Problem C

Sixteen is Just Perfect

A wall is covered with balloons. Each balloon has the number 5, 3 or 2 printed on it. You are given 7 darts to throw at the wall. If your dart breaks a balloon, then you earn the number of points printed on the balloon. If your dart does not break a balloon, then you are awarded 0 points for that shot. You win a prize if your total score is exactly 16 points on seven shots. If your total is over 16 or under 16, then you lose.

Determine the number of different point combinations that can be used to win the game.

