

1. A blank T-120 VHS videocassette tape has space for exactly two hours in SP mode, four hours in LP mode, and six hours in EP mode. Vino has recorded three one-hour episodes of *Party of Five* on the same tape: the first one in SP, the second in LP, and the third in EP. What is the number of minutes in SP mode that remain on the tape?

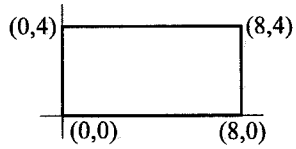
1. _____

2. In the sequence below, there are one 1, two 2's, three 3's, and so on, up to ten 10's. What is the mean of the mean, mode and median of the sequence?

2. _____

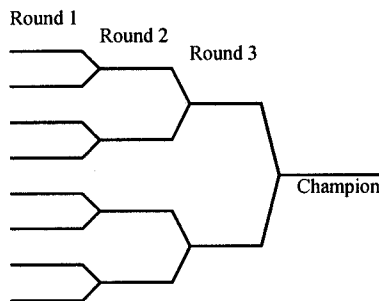
1, 2, 2, 3, 3, 3, . . . , 10, 10, 10, 10, 10, 10, 10, 10, 10

3. A point (x, y) is randomly selected from the rectangular region shown. What is the probability that $x^2 + y^2 \leq 4$? Express your answer as decimal to the nearest thousandth.



3. _____

4. In a single elimination tournament, the better player always won. The winner of Round 3 was the champion, and the loser of Round 3 was the runner-up. Eight players were randomly assigned slots in Round 1. What is the probability that the runner-up was not the second-best player in the tournament? Express your answer as a common fraction.



4. _____

5. Point P is 9 units from the center of a circle of radius 15. How many different chords of the circle contain P and have integer lengths?

5. _____

6. Four cubes of volumes 1 cm^3 , 8 cm^3 , 27 cm^3 , and 125 cm^3 are glued together at their faces. What is the number of square centimeters in the smallest possible surface area of the resulting solid figure?

6. _____

7. Pine Lane Middle School's student council has 10 boys and 8 girls serving as representatives. A subcommittee containing 3 boys and 3 girls is formed to organize a student dance. How many different subcommittees can be formed?

7. _____

8. Two numbers are called "mirror numbers" if the digits of the two numbers are in reverse order. For instance, 421 and 124 are mirror numbers. What is the sum of the two mirror numbers whose product is 110,080?

8. _____