

41. A palindrome is a number that reads the same from left to right as from right to left. What is the smallest integer greater than 100 which is both a palindrome and a perfect square?

Answer: 121

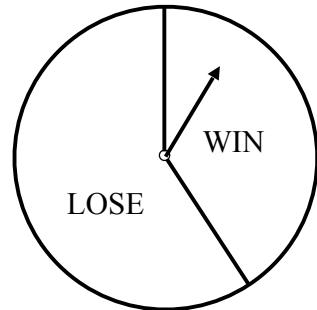
42. The square root of  $x$  is greater than 3 and less than 4. How many integer values of  $x$  satisfy this condition?

Answer: 6 (values)

43. What is the absolute value of the difference of the square of the cube of 2 and the cube of the square of 2?

Answer: 0

44. A circular spinner for a game has a radius of 5 cm. The probability of winning on one spin of this spinner is  $\frac{1}{4}$ . What is the area, in square centimeters, of the WIN sector? Express your answer in terms of  $\pi$ .



Answer:  $10\pi$  (cm $^2$ )

45. Kenton watched 2000 adults board a cruise ship. Half of the adults were women. If 20% of the women and 9% of the men were wearing sunglasses, what was the total number of men and women wearing sunglasses?

Answer: 290 (men and women)

46. If  $a + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$ , what is the value of  $a$ ?

Answer: 2

47. Four pencils and a pen cost \$3.00. If a pen costs \$1, how many dollars will 12 pencils and two pens cost?

Answer: 8 (dollars)

48. A book with 53 pages numbered 1 to 53 has its pages renumbered in reverse, from 53 to 1. For how many pages do the page numbers from each set of numbers share the same units digit?

Answer: 11 (pages)

49. What is the sum of all the positive two-digit integers where one of the digits is four times the other?

Answer: 165

50. Point A is at  $(0, 0)$  and point B is on the line  $y = 4$ . The slope of segment AB is \_\_\_\_\_. What is the sum of the  $x$ - and  $y$ -coordinates of point B?

Answer: 10