



# Warm-Up 2

11. \_\_\_\_\_ What is the least possible sum of the digits displaying the time on a 12-hour digital clock?

12. \_\_\_\_\_ palin-  
dromes How many 4-digit palindromes contain both the digits 1 and 2?

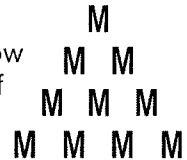
13. \_\_\_\_\_ cm What is the radius of a circle with a circumference measuring  $24\pi$  cm?

14. \_\_\_\_\_ On a number line, what number is two-thirds of the distance from one-half to 2.25? Express your answer as a common fraction.

15. \_\_\_\_\_ m<sup>2</sup> The length of a rectangular sports field is three times its width. If the perimeter of the field is 880 meters, what is the area of the field?

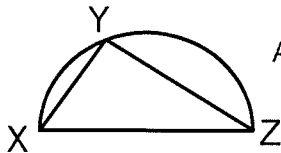
16. \_\_\_\_\_ An item with an original price of  $d$  dollars has its price increased by  $x$  percent in April and then decreased by  $x$  percent in May. The resulting price is 4 percent less than the original price. What is the value of  $x$ ?

17. \_\_\_\_\_ rows Letter  $M$ s are stacked, as shown, so that the top row has one  $M$ , the second row has two  $M$ s, the third row has three  $M$ s, and so on. What is the least number of rows required for the total number of stacked  $M$ s to be divisible by 7?



18. \_\_\_\_\_ minutes Josh mowed one-third of a 2000-ft<sup>2</sup> lawn in 18 minutes. At the same rate, how many minutes would it take him to mow a 4200-ft<sup>2</sup> lawn? Express your answer to the nearest whole number.

19. \_\_\_\_\_ units<sup>2</sup>



Arc  $XYZ$ , shown here, is a semicircle. If  $XZ = 15$  units, what is the value of  $(XY)^2 + (YZ)^2$ ?

20. \_\_\_\_\_ Seven contestants enter a drawing that begins with 100 balls numbered 1 through 100 in a box. Each contestant randomly selects a ball without replacement. The two contestants who select balls with the two highest numbers each will win a cash prize. The first six contestants select balls numbered 83, 5, 44, 67, 21 and 30. What is the probability that the last contestant will win a cash prize? Express your answer as a common fraction.