



Warm-Up 8

101. _____ ha A pasture with an area of 25 hectares is enclosed using 2 km of fencing. Another pasture is to be enclosed. For the second pasture, how many hectares of land can 8 km of fencing enclose if the two fenced areas are similar?

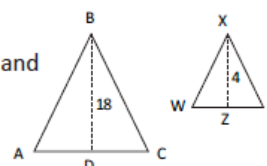
102. _____ stickers Angie is purchasing stickers to make house numbers for the houses in her neighborhood. If the houses are numbered consecutively from 101 to 250 and each sticker contains a single digit, how many stickers containing the digit 3 does Angie need to purchase?



103. _____ For what value of x does $3x + 3 = 2x + 7$?

104. _____ mi Tim drove at an average rate of 30 mi/h, and Kim drove at an average rate of 40 mi/h for three times as long as Tim. Together they drove a total of 225 mi. How far did Tim drive?

105. _____ cm Triangle ABC with an area of 243 cm^2 is similar to $\triangle WXY$. If $BD = 18 \text{ cm}$ and $XZ = 4 \text{ cm}$, what is the length of segment WY ?



106. (_____ , _____) What are the coordinates of the midpoint of segment AB with endpoints $A(-2, 4)$ and $B(3, -3)$? Express the coordinates as decimals to the nearest tenth.

107. _____ students At Euclid Middle School there are 33 students in the chorus, 45 students in the band and 21 students in the orchestra. Fifteen students are in both the band and chorus, 9 are in both orchestra and chorus, 4 are in the band and orchestra and 2 students are in all three. How many students are in the orchestra only?



108. _____ What is the positive difference between the range and the mean of the set $\{4, 5, 7, 7, 8, 8, 8, 9, 16\}$?

109. _____ m A rectangle measures 18 m by 24 m. What is the sum of the lengths of its diagonals?

110. _____ mi/h Blake traveled 117 mi in 2.25 hours to come home from college. What was the average speed at which Blake traveled?