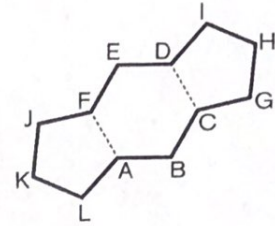




Warm-Up 2

41. _____ If the value of x is 10, what is the value of $3x + 4x + 5x$?

42. _____ feet In the figure, two regular pentagons have been attached to a regular hexagon to create a 12-gon. If each regular polygon has side length 3 feet, what is the perimeter of the resulting 12-gon?



43. _____ ft/s A speed of 60 miles per hour is equal to 88 feet per second. If the speed limit in a school zone is 15 miles per hour, what is the speed limit in this zone in feet per second?

44. _____ divisors How many divisors of 64 are perfect squares?

45. _____ If $ab = 2c$, $bd = c$, $b \neq 0$ and $d = 16$, what is the value of a ?

46. _____ square blocks



All of the streets in Tom's city are on a regular rectangular grid and run east-west or north-south. Tom starts at the intersection of Poyntz Avenue and Eleventh Street and walks 2 blocks east, then 3 blocks north, then 4 blocks east, then 5 blocks north. Tom then returns to his starting location by walking 6 blocks west, then 8 blocks south. What is the area, in square blocks, enclosed by Tom's path?

47. _____ What is the value of $\frac{\frac{1}{2} + \frac{1}{3}}{\frac{1}{4} - \frac{1}{5}}$? Express your answer as a common fraction.

48. _____ What is the arithmetic mean of $\frac{2}{3}$, $\frac{7}{9}$, $\frac{1}{4}$ and $\frac{5}{16}$? Express your answer as a common fraction.

49. _____ If a and b are real numbers such that $a + b = a - b$ and $a \neq b$, what is the value of $\frac{a^2b + a + b - ab^2}{a - b}$?

50. _____ Given that 75% of a certain number is 88, what is $\frac{3}{8}$ of the number?