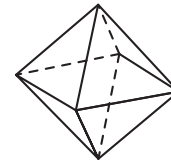


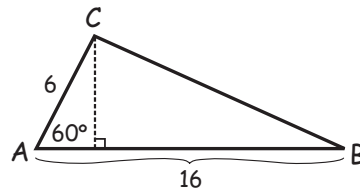



Warm-Up 8



- _____ cm If each edge of a regular octahedron is 5 cm, what is the shortest length of tape needed to cover every edge?
- _____ nickels A jar contains \$1.70 in nickels, dimes and quarters. There are twenty coins in all with twice as many nickels as dimes. How many nickels are in the jar?
- _____ A class of 24 students took a test. The mean of the test scores for the whole class was 75 and the mean of the test scores for the 20 students who passed was 80. What was the mean of the test scores for the students who did not pass?
- _____ Ten unpainted chairs numbered one through ten are arranged in increasing order clockwise around a table. A painter paints Chair #1 and then proceeds clockwise around the table, always painting the second unpainted chair he comes to. After painting Chair #1, he paints Chair #3 next, and so on. What is the number of the seventh chair he paints?
- _____ An arithmetic sequence is a sequence of numbers in which the difference between any two successive terms is the same. The first term of a particular arithmetic sequence is 7 and the fifth term of the sequence is 19. What is the 17th term of the sequence?

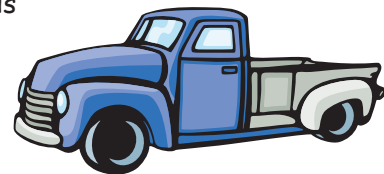
- _____ units In triangle ABC, $m\angle A = 60^\circ$ and sides AB and AC have lengths of 16 and 6 units. What is the length of side BC?



- _____ M&Ms  Jay ate one-half of the M&Ms in a bag. Kay ate one-third of the rest. Then Ella ate one-fourth of those that remained. Finally, Emma ate one-fifth of the remaining M&Ms. At this point, 60 M&Ms were left in the bag. In total, how many M&Ms were eaten by Jay, Kay, Ella and Emma?

- _____ unit cubes Suppose 120 unit cubes are glued together to form a 4 by 5 by 6 rectangular prism. The entire outside of the prism is painted. Then, it is broken apart again, back to the original unit cubes. How many unit cubes have exactly two painted faces?

- _____ pm Mr. Harris made a trip of 500 miles in 10 hours, including lunch. Before he stopped for lunch at 1:00 pm, he averaged 60 mph. When he began his trip again at 2:00 pm, he averaged 50 mph and continued at that rate for the rest of the trip. If no time zones are crossed, at what time did he complete his 500-mile trip?



- _____ Point P is outside of circle O. Line segments PA and PB are tangent to circle O at points A and B, respectively. If angle P measures 60 degrees, what fraction of the circumference of circle O is the minor arc AB? Express your answer as a common fraction.