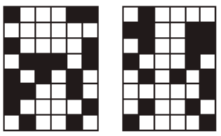
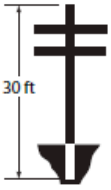
# Warm-Up 9

121. H

In the two grids shown, some of the squares are black, and the remaining squares are transparent. If the grid on the left were translated so that it completely covers the grid on the right, what letter would be formed by the black squares?



122. 24 ft




A 30-ft-long telephone pole is perpendicular to the ground, as shown. The height of the pole above ground is four times the length of the portion of the pole located below ground. How many feet above ground is the top of the pole?

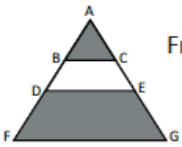
123. 390

The units digit of a positive three-digit integer is 0. The sum of the other two digits is 12. Interchanging the tens and hundreds digits increases the number by 540. What is the original number?

124. 216 outcomes

A student rolls three standard, six-sided dice (one red, one blue and one green). How many possible outcomes are there for the three values showing on the top faces of the dice?

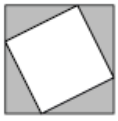
125. 115 °




From a piece of striped material, Tanya cut out the isosceles triangle shown here. If the measure of the vertex angle of this large isosceles triangle is 50° and $\overline{BC} \parallel \overline{DE} \parallel \overline{FG}$, what is the measure of $\angle BCE$?

126. 44 %

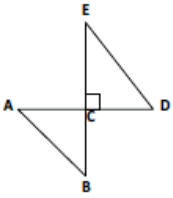
If the vertices of the smaller square divide each side of the larger square in the ratio of 2:1, in the figure shown, what percentage of the larger square is shaded? Express your answer to the nearest whole number.



127. 1/16

If the probability that Christoph will get an A on a test is 0.25, what is the probability that he will get an A on the next two tests? Express your answer as a common fraction.

128. $\sqrt{89}$ units




In the figure shown, point C is the midpoint of segment AD, and BC = $\frac{2}{3}$ EC. If AD = 10 units, and the area of ΔCDE is 30 units², how long is segment AB? Express your answer in simplest radical form.

129. 72 milk balls

Mandy had a box of chocolate malted milk balls. She ate 5 and gave her brother 3. Then she passed around the remaining milk balls to the 8 members of the math team. The first team member took 1, the second took 3, the third took 5, and so on, with each team member taking the next higher odd number of milk balls. There were just enough milk balls in the box for the last team member to take her correct amount. What was the original number of milk balls in Mandy's box?

130. (3, 6)

Point P(3, 2) lies on the graph of the equation $y = 3x - 7$. What are the coordinates of the image of point P after the line is reflected across the $y$-axis and translated up 4 units?