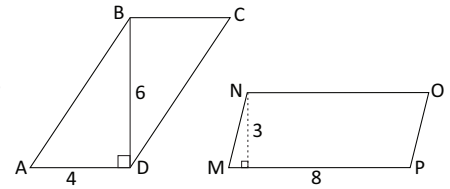




Warm-Up 4

41. _____ What is the ratio of the area of $\triangle ABD$ to the area of parallelogram $MNOP$, shown here? Express your answer as a common fraction.

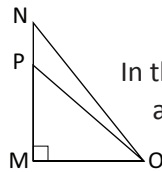


42. _____ What is the value of $2015^2 - 2013^2$?

43. _____ What is the difference between the following sums?

$$\begin{array}{r} 12,345 \\ 12,340 \\ 12,300 \\ 12,000 \\ + 10,000 \\ \hline \end{array} \qquad \begin{array}{r} 54,321 \\ 4,321 \\ 321 \\ 21 \\ + 1 \\ \hline \end{array}$$

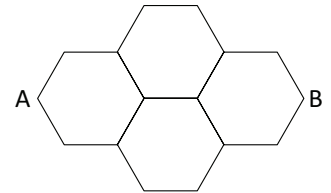
44. _____ units



In the figure, MP is 20% less than MN . If $PN = 4$ units and \overline{MO} is three times as long as \overline{PN} , what is the length of \overline{OP} ?

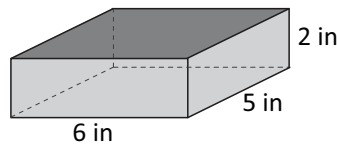
45. _____ paths

Four regular hexagons of side length 1 unit are placed together as shown. How many paths of length 7 units are there from point A to point B along edges of the hexagons?



46. _____ in²

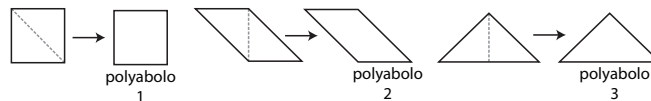
The top base has been removed from a right rectangular prism as shown. The result is an open box that measures 6 inches by 5 inches by 2 inches. Each exterior face of the box is painted red, and each interior face of the box is painted blue. What is the total area of the box's painted surfaces?



47. _____ What is the value of $\frac{ab^2c + 5}{x^0y}$ if $a = 3$, $b = -2$, $c = 10$, $x = -7$ and $y = 5$?

48. _____ poly-
aboloes

A polyabolo is a polygon formed by joining congruent isosceles right triangles in such a way that each triangle shares a side with at least one other triangle. Three distinct polyaboloes can be formed from two triangles, as shown below. If rotations and reflections are not counted separately, how many distinct polyaboloes can be formed from three triangles?



49. _____ dimes

McCall has \$14.00 in change, and he has only nickels, dimes and quarters. If McCall has the same number of each type of coin, how many dimes does McCall have?

50. _____ days

Lorna observed that her brother wore green on 9 of the last 21 days. Assuming the same rate, on how many days would Lorna expect him to wear green in the next five weeks?