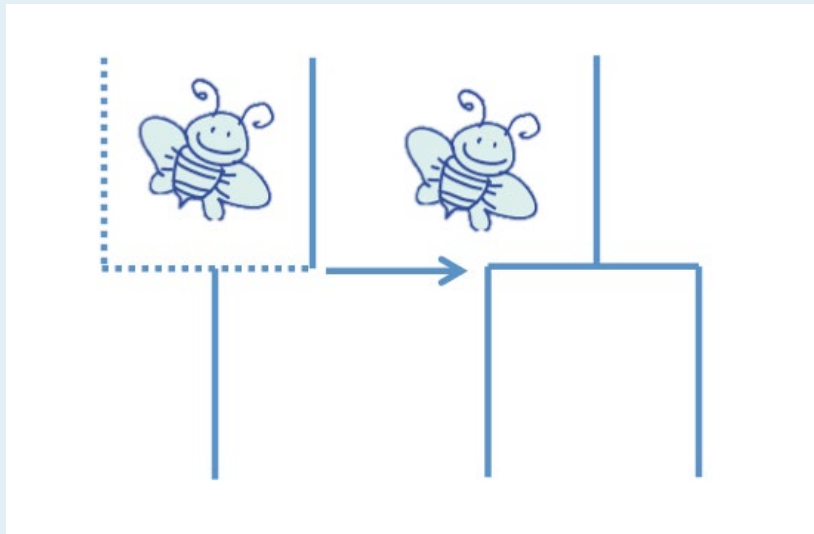
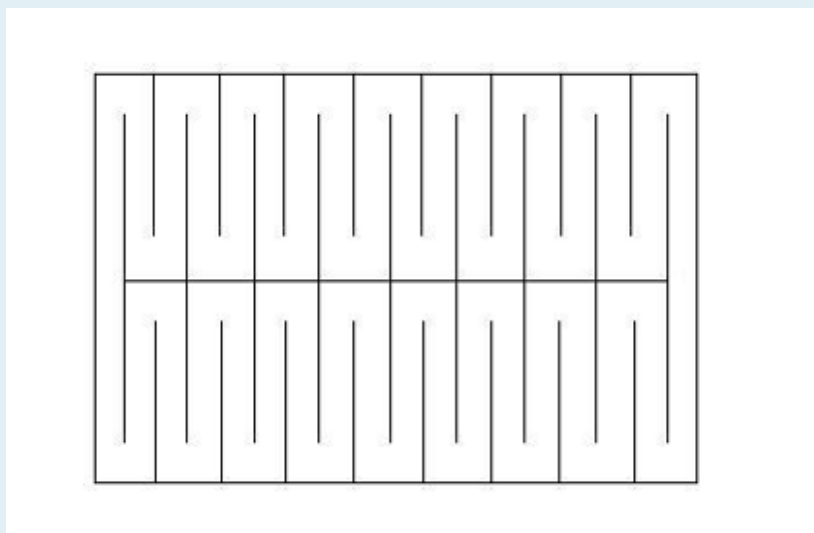


ANSWERS - AMUSEMENTS

#1



#2



ANSWERS - AMUSEMENTS

#3 POSSIBLE ANSWERS

$$\begin{aligned} 1 + 1 + 1 &= 3 \\ 2 + 2 \div 2 &= 3 \\ 3 - 3 + 3 &= 3 \end{aligned}$$

$$\begin{aligned} 4 - 4 \div 4 &= 3 \\ 5 \times .5 + .5 &= 3 \\ 6 \times .6 - .6 &= 3 \end{aligned}$$

$$\begin{aligned} 4 - 4 \div 4 &= 3 \\ \sqrt{8 + 8 \div 8} &= 3 \\ 9 - 9 + \sqrt{9} &= 3 \end{aligned}$$

#4

$$2014 = 2 \times 19 \times 53; 2015 = 5 \times 13 \times 31$$

#4

One possible answer: Fill the 3-gallon pail and pour the water into the 8-gallon pail. Then fill the 3-gallon pail again and pour the water into the 8-gallon pail. The 8-gallon pail now has 6-gallons of water. Fill the 3-gallon pail a third time and pour water into the 8-gallon pail to fill it. The water remaining in the 3-gallon pail is exactly 1 gallon. Finally, pour the 8-gallons of water in the 8-gallon pail back into the well.

#6 There are 336 possible answers. Here is one possible answer:

$$\begin{array}{r} \boxed{1} \boxed{5} \boxed{2} \\ + \boxed{7} \boxed{8} \boxed{4} \\ \hline \boxed{9} \boxed{3} \boxed{6} \end{array}$$

OLYMPIAD ZONE PG 9-10

Answers:

#1: 20 paws

#2: 11 candies

#3: 19 squares

#4: 6 hours

#5: 167 degrees

#6: 854 apples

#7: $R + S + M = 18$

#8: $X = 1983$