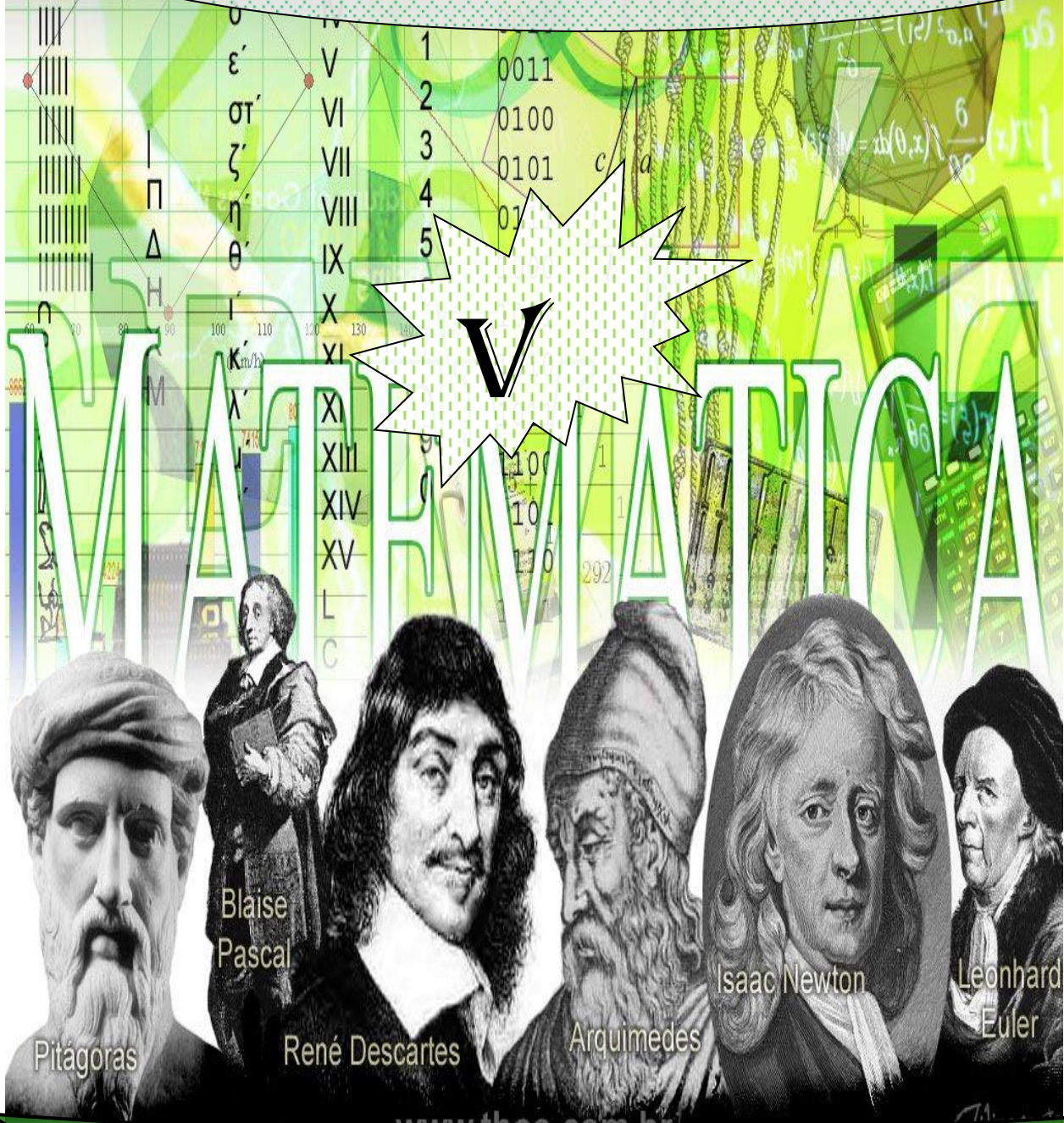




INDIAN SCHOOL SOHAR

FUN WITH MATHS

(HOLIDAY HOME WORK)



Pitágoras

Blaise
Pascal

René Descartes

Arquimedes

Isaac Newton

Leonhard
Euler

BY
DEPARTMENT OF MATHEMATICS

CROOKED CALCULATOR

RAVI MANAGES TO PRESS THE RIGHT KEYS OF THE CALCULATOR, BUT GETS THEM WRONG ANSWER. FIND THE KEYS IN THE RIGHT ORDER

$$\text{ON/C} \quad 2 \quad 3 \quad + \quad 5 \quad 6 \quad =$$

61

$$\text{ON/C} \quad 5 \quad + \quad 3 \quad - \quad 2 \quad =$$

0

$$\text{ON/C} \quad 8 \quad \div \quad 8 \quad 4 \quad 2 \quad =$$

103

$$\text{ON/C} \quad \sqrt{\quad} \quad 3 \quad 1 \quad + \quad 6 \quad =$$

7

SHREYA HAS GOT ALL THE SUMS WRONG EACH TIME SHE PRESSED EXACTLY ON WRONG KEY. FIND THE WHICH KEY SHREYA PRESSED IS WRONG ?

$$\text{ON/C} \quad 2 \quad 5 \quad + \quad 3 \quad 6 \quad =$$

900

$$\text{ON/C} \quad 5 \quad + \quad 3 \quad + \quad 2 \quad =$$

317

$$\text{ON/C} \quad 8 \quad + \quad 8 \quad + \quad 2 \quad =$$

3

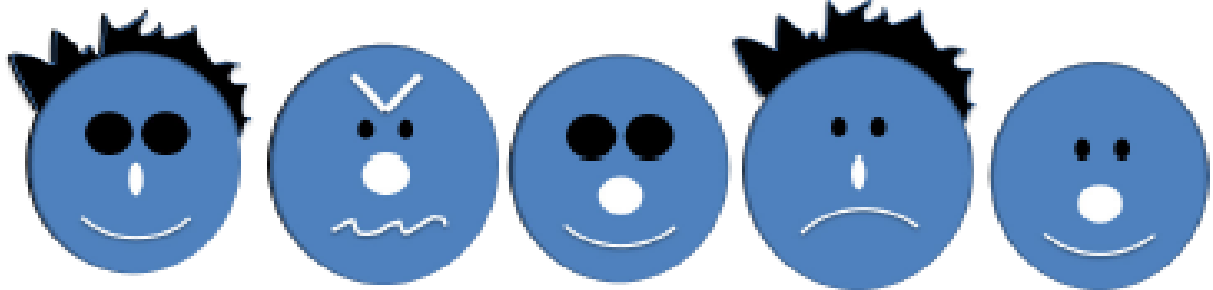
$$\text{ON/C} \quad \sqrt{\quad} \quad 1 \quad 6 \quad + \quad 1 \quad =$$

41

LOGICAL THINKING

Give each face a name

These are the faces of SAM, SINO, SIYA, SACHA and SALLY.





















Use the clues to work out which name goes with each face.

Clues

- Sally has hair and big eyes
- Sam has hair and is sad
- Sino is angry
- Siya has a big nose and big eyes
- Sacha is smiling and has small eyes

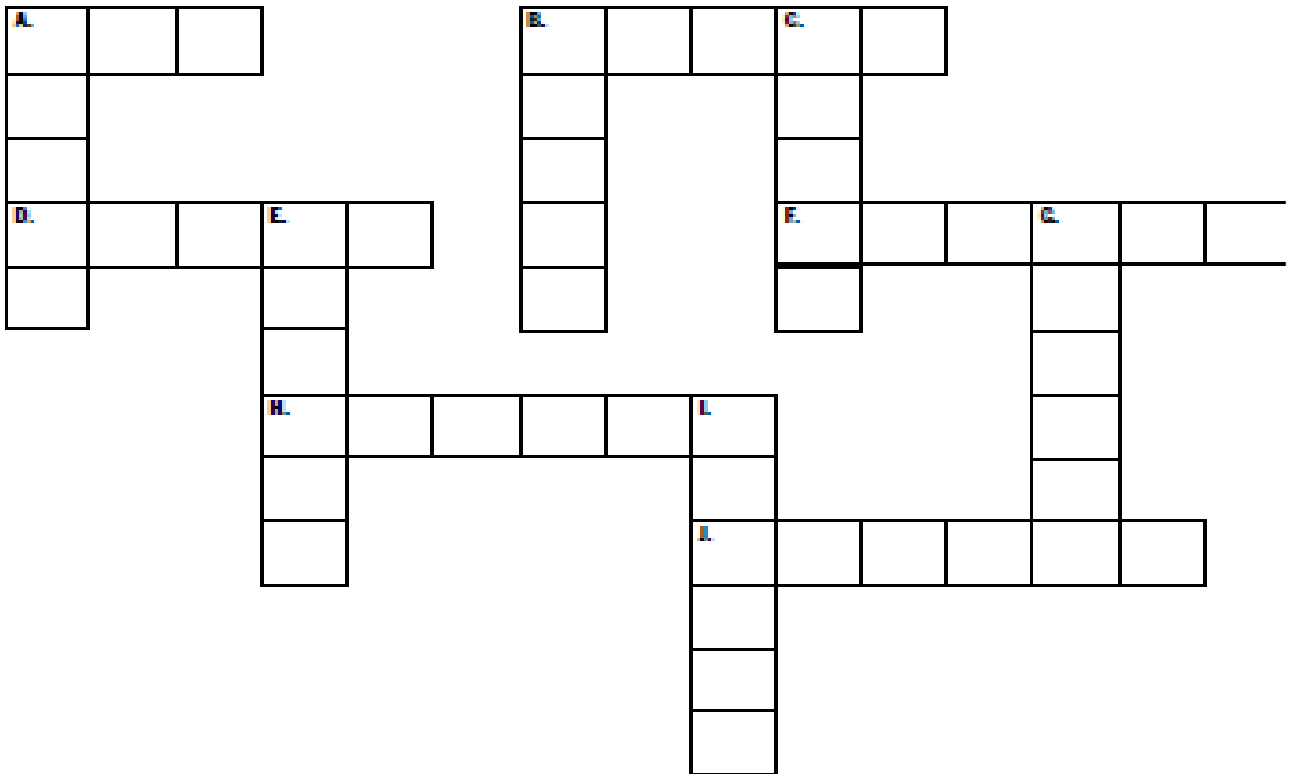
- In this grid, each shape stands for a number.
- The numbers shown are the totals of the line of three numbers in the row or column.
- Find the remaining totals.
- Say what number each shape stands for

				
				28
				20
				
30	24		28	

ARITHMETIC POWER

DO THE MULTIPLICATION GIVEN AT THE BOTTOM .AND WRITE THE NUMBERS IN THE CROSSWORD PUZZLE



Across

- A. $24 \times 16 =$ _____
 B. $410 \times 103 =$ _____
 D. $392 \times 145 =$ _____
 F. $997 \times 817 =$ _____
 H. $1,157 \times 102 =$ _____
 J. $1,168 \times 455 =$ _____

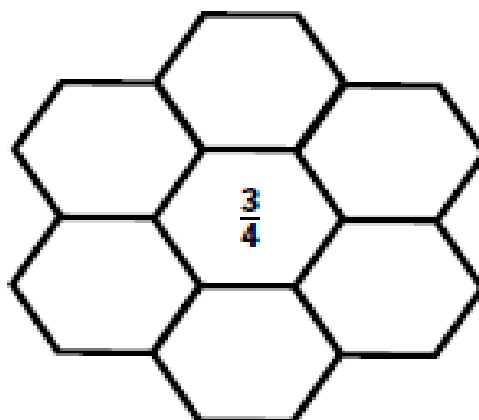
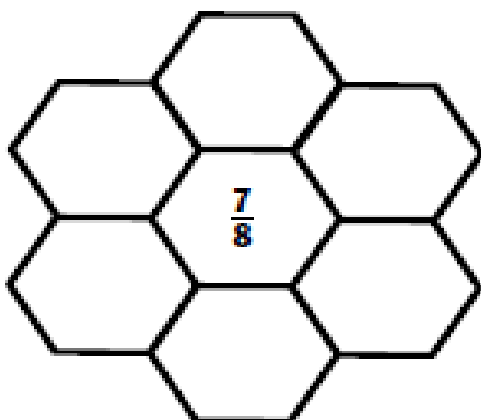
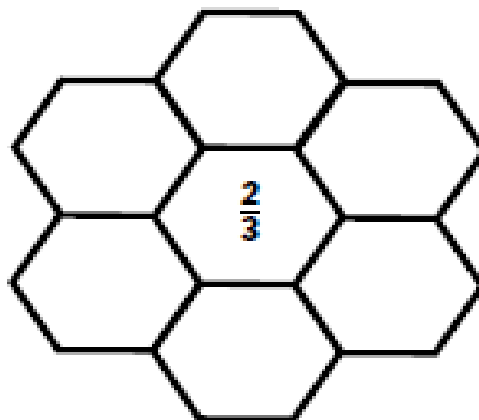
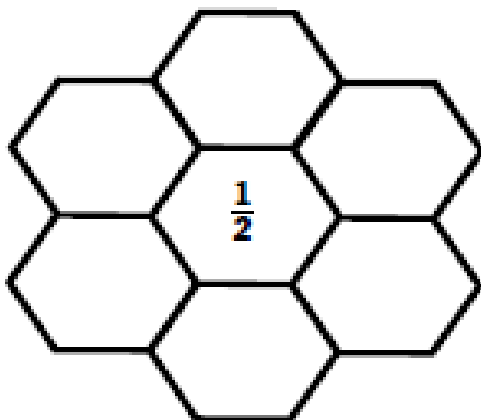
Down

- A. $375 \times 86 =$ _____
 B. $418 \times 119 =$ _____
 C. $342 \times 102 =$ _____
 E. $1,056 \times 467 =$ _____
 G. $1,122 \times 507 =$ _____
 I. $1,194 \times 365 =$ _____



FRACTIONS

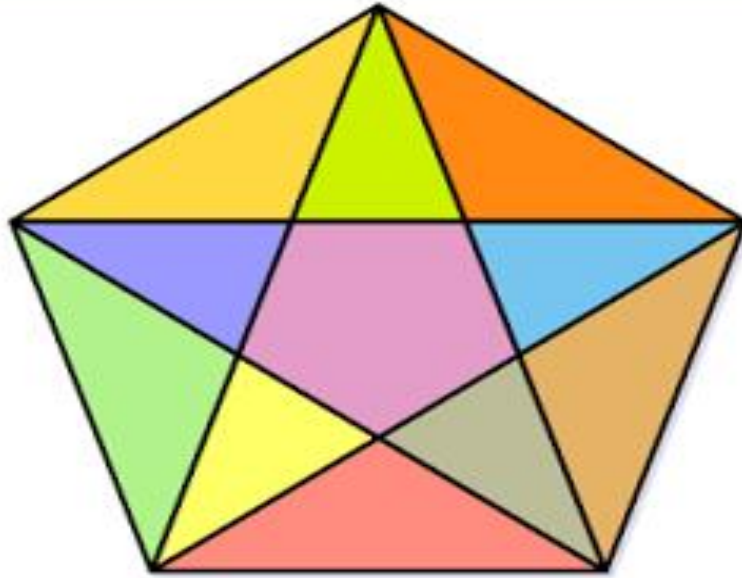
SELECT THE EQUIVALENT FRACTIONS FROM THE BANK AND PLACE IT ON THE PETALS OF THE FLOWERS



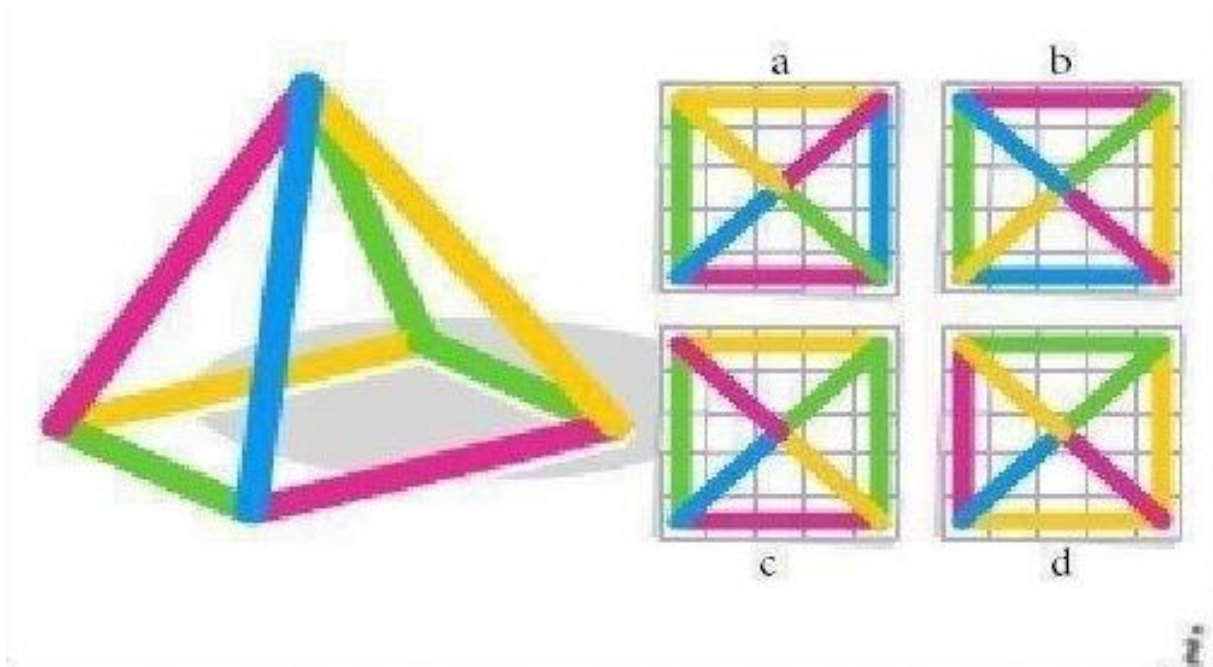
$\frac{7}{14}$	$\frac{2}{18}$	$\frac{20}{30}$	$\frac{27}{36}$	$\frac{30}{40}$	$\frac{14}{16}$	$\frac{4}{6}$	$\frac{21}{24}$	$\frac{6}{12}$
$\frac{33}{44}$	$\frac{70}{80}$	$\frac{15}{20}$	$\frac{10}{20}$	$\frac{5}{30}$	$\frac{9}{18}$	$\frac{6}{9}$	$\frac{63}{72}$	$\frac{77}{88}$
$\frac{33}{66}$	$\frac{12}{18}$	$\frac{50}{75}$	$\frac{12}{24}$	$\frac{35}{40}$	$\frac{75}{100}$	$\frac{2}{9}$	$\frac{6}{8}$	$\frac{34}{51}$

INTELLIGENCE TEST

HOW MANY TRIANGLES ARE THERE IN THE DIAGRAM?

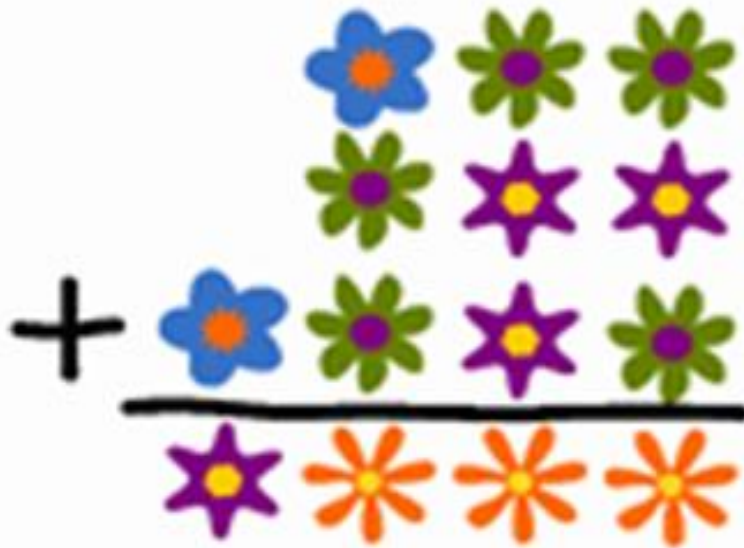


WHICH IS THE TOP VIEW OF THE FOLLOWING FIGURE?

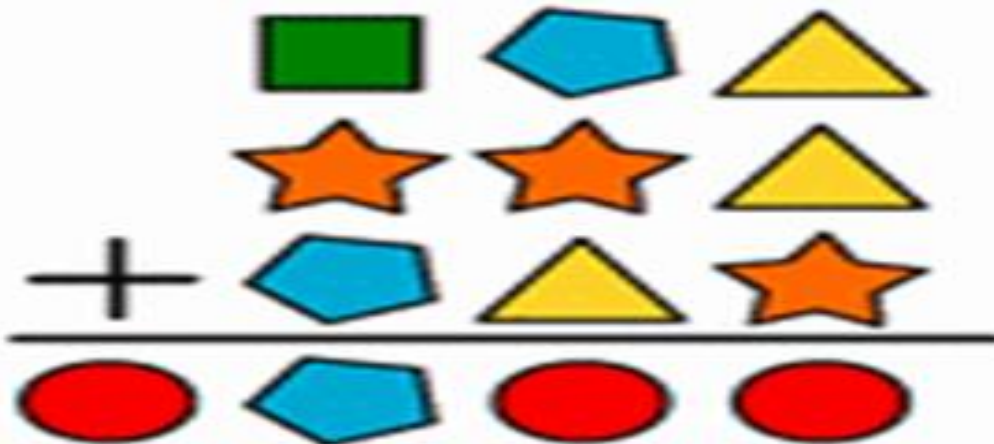


SYMBOL NUMBER CORRESPONDENCE

Connect these flowers with the numbers 1, 2, 3 and 4 which can complete the following addition problem



Connect these symbols with the numbers 1, 2, 3, 4 and 5 which can complete the following addition problem



FIND THE MATCH

Reduce all of the fractions on the left side of the page to their lowest terms. Find the exact match in the boxes on the right. When you have found the match, take the word from the left and write it in the box with the matching answer at the right. Reveal an answer to the following question by reading down column one and then down column two.

WHY DID THE SWORD SWALLOWER SWALLOW AN UMBRELLA?

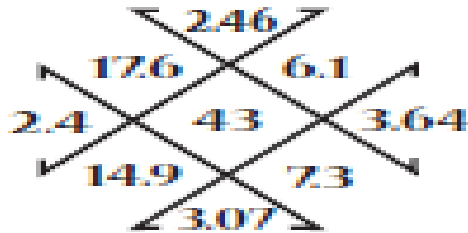
HE $\frac{5}{6} = \frac{2}{3}$	RETIRING $\frac{12}{14} =$
PUT $\frac{6}{18} =$	WANTED $\frac{3}{8} =$
DAY $\frac{7}{12} =$	AWAY $\frac{15}{21} =$
A $\frac{14}{16} =$	SOON $\frac{5}{12} =$
WOULD $\frac{7}{27} =$	HE $\frac{10}{16} =$
FOR $\frac{9}{12} =$	KNEW $\frac{4}{20} =$
TO $\frac{8}{18} =$	RAINY $\frac{14}{18} =$
SOMETHING $\frac{8}{36} =$	BE $\frac{10}{12} =$
VERY $\frac{6}{10} =$	THAT $\frac{9}{21} =$
HE $\frac{10}{18} =$	SO $\frac{12}{32} =$

COLUMN ONE	COLUMN TWO
$\frac{5}{6}$	$\frac{3}{8}$ HE
$\frac{1}{6}$	$\frac{1}{4}$
$\frac{3}{7}$	$\frac{6}{8}$
$\frac{5}{8}$	$\frac{1}{3}$
$\frac{1}{6}$	$\frac{3}{6}$
$\frac{5}{6}$	$\frac{5}{7}$
$\frac{5}{7}$	$\frac{3}{4}$
$\frac{9}{6}$	$\frac{7}{8}$
$\frac{1}{2}$	$\frac{7}{6}$
$\frac{9}{8}$	$\frac{1}{6}$.

MATHS WITH SHAPES

Study the shapes in equations 1–6. Each shape has only one match in the number grids at the right. Use the shapes to fill in the missing numbers in the equations. Solve each number sentence. Check your answers against the scrambled answers below.

272	3.06	24.3
0.83	86	6.33
64.1	5.5	4.07



1. (86 + 7.3) - (43 + 6.33) = _____

2. (+) - (+) = _____

3. (+) - (+) = _____

4. (+) - (+) = _____

5. (+) - (+) = _____

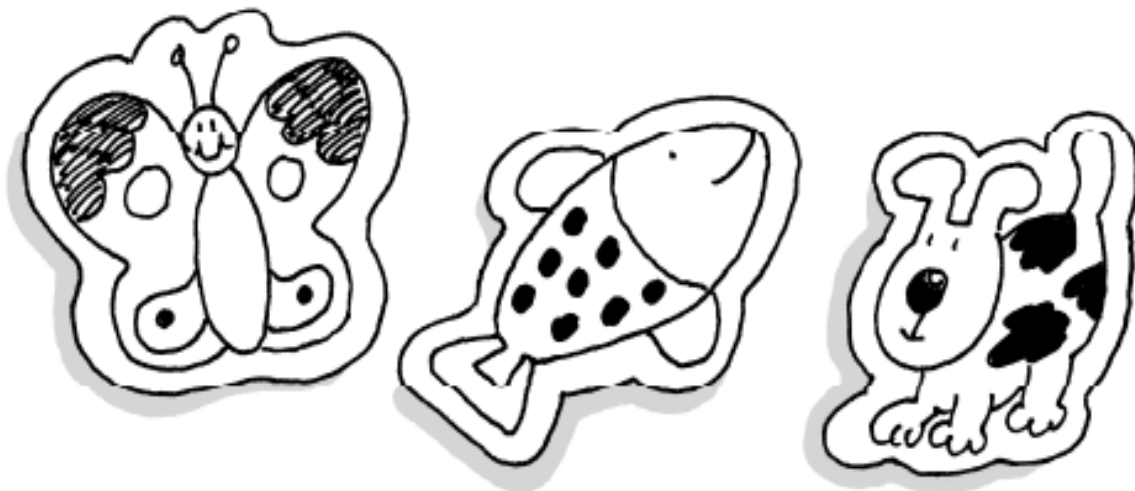
6. (+) - (+) = _____

PUZZLE TIME

- ❖ Kishore has three cats. Each is a different weight. The first and second weigh 7kg altogether. The second and third weigh 8 kg altogether. The first and third weigh 11 kg altogether. What is the weight of each cat?

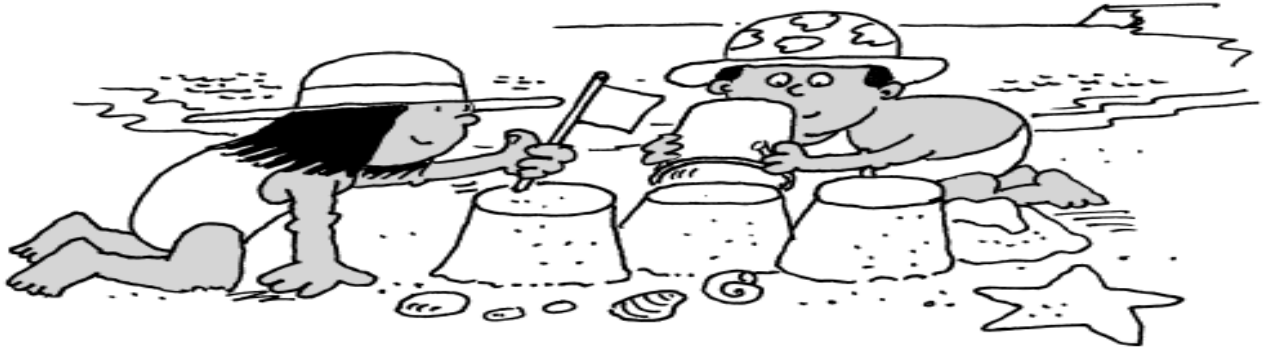


- ❖ The twins collected some animal stickers. They each had the same total number. Winston had 3 full sheets and 4 loose stickers. Wendy had 2 full sheets and 12 loose stickers. Every full sheet has the same number of stickers. How many stickers are there in a full sheet?



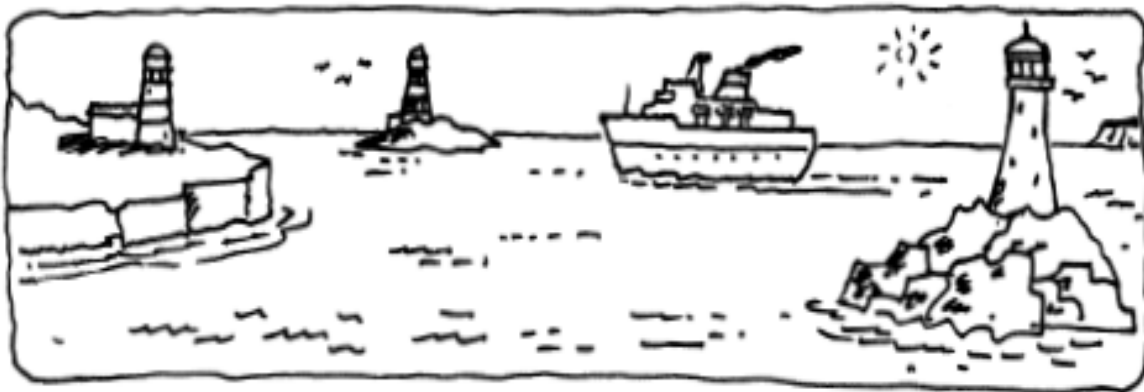
- ❖ Lisa went on holiday. In 5 days she made 80 sandcastles. Each day she made 4 fewer castles than the day before. How many castles did she make each day?

Lisa went on making 4 fewer castles each day. How many castles did she make altogether?



- ❖ On the coast there are three lighthouses. The first light shines for 3 seconds, then is off for 3 seconds. The second light shines for 4 seconds, then is off for 4 seconds. The third light shines for 5 seconds, then is off for 5 seconds.

All three lights have just come on together. When is the first time that all three lights will be off? When is the next time that all three lights will come on at the same moment?



TARGET - SUDOKU

- Insert 1,2,3 and 4 in to the grid such that
- No number is repeated in the same row or column and
- The number in the cages produce that target number using the indicated operation

(a)

$8\times$	$4+$		$12\times$
	1	$6+$	
$6+$			
	4	$6\times$	

(b)

$3\times$		2	$4\times$
$6+$	$7+$		
	$6\times$	$4+$	
1		$8\times$	

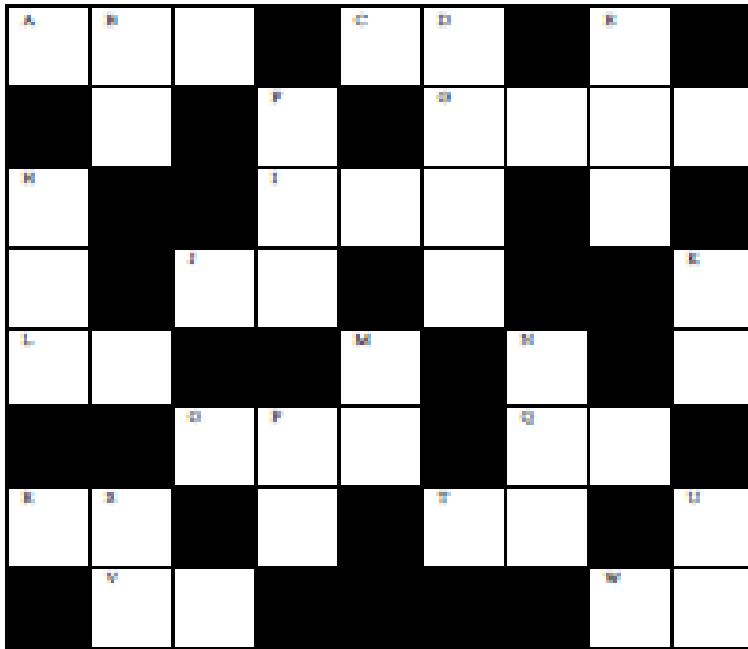
(c)

$6\times$		$12\times$	
		$12\times$	1
$9+$			
2	$8+$		

(d)

$6+$	$3\times$		4
	$7+$	$3+$	
$3\times$		$24\times$	1
	2		

CROSSWORD PUZZLE



Across:

- A. The next odd number after 769
- C. 6 sets of 3
- G. six thousand, three hundred seven
- I. Next number in the following sequence
338, 344, 350, 356, _____
- J. $444 \div 6$
- L. $25 + 47$
- O. $1 + 30 + 4 + 100 + 50$
- Q. 6 times 7
- R. _____ $\div 9 = 4$
- T. Number of cents in 2 quarters and 3 dimes
- V. A number between 40 and 50 that is a multiple of 3, 5, 9, and 15
- W. The product of 8 and 9

Down:

- B. 87 decreased by 9
- D. $8000 + 600 + 20 + 9$
- E. 746 increased by 60
- F. 50 less than 784
- H. Number of minutes in 2 hours and 37 minutes
- K. triple 8 plus 4
- M. Next number in the following sequence
107, 104, 101, 98, _____
- N. 24×35
- P. 9^2
- S. Double 32
- U. $119 - 37$

WHOLE NUMBER PUZZLE

Using the numbers given in the table below ,complete each puzzle

(a)

11	-		=		=		+	
+		-		×		+		×
=		=		=		=		=
	÷		=	16	=		+	6
=		=		=		=		=
		0						
×		+		×		÷		-
	÷		=		=		+	1

1	2	2	2	2	3	3	3	4
4	4	4	6	7	8	8	10	21
30	32							

(b)

	÷		=	10	=		×	
-		+		-		+		-
12								0
=		=		=		=		=
	÷		=	8	=		+	
=		=		=		=		=
×		×		+		-		-
	+	3	=		=		+	

0	1	1	2	2	2	2	3	3
4	4	5	5	5	6	6	9	24
48	60							

(c)

	×		=		=		+	28
×		+		÷		×		÷
=		=		=		=		=
40	-		=	6	=		÷	
=		=		=		=		=
÷		-		-		+		+
2	×		=		=	1	+	

2	2	3	3	4	4	4	4	5
7	10	10	21	30	31	34	36	41
42	80							

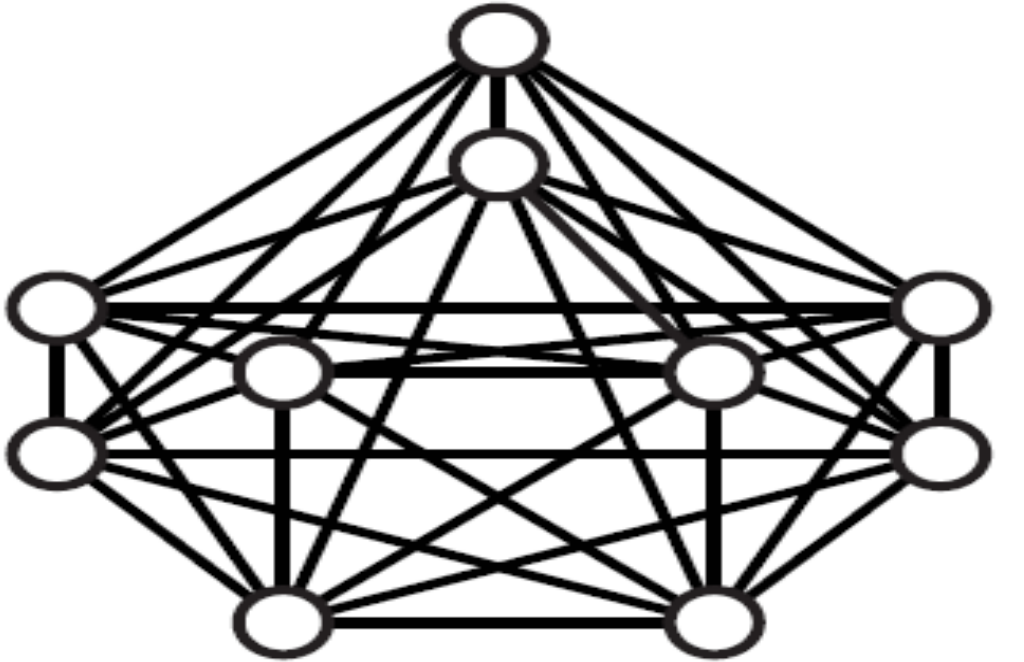
(d)

	+		=		=		×	
÷		×		-		+		-
7								
=		=		=		=		=
	×		=	36	=		×	4
=		=		=		=		=
						9		
÷		-		-		×		+
	-	5	=		=		+	

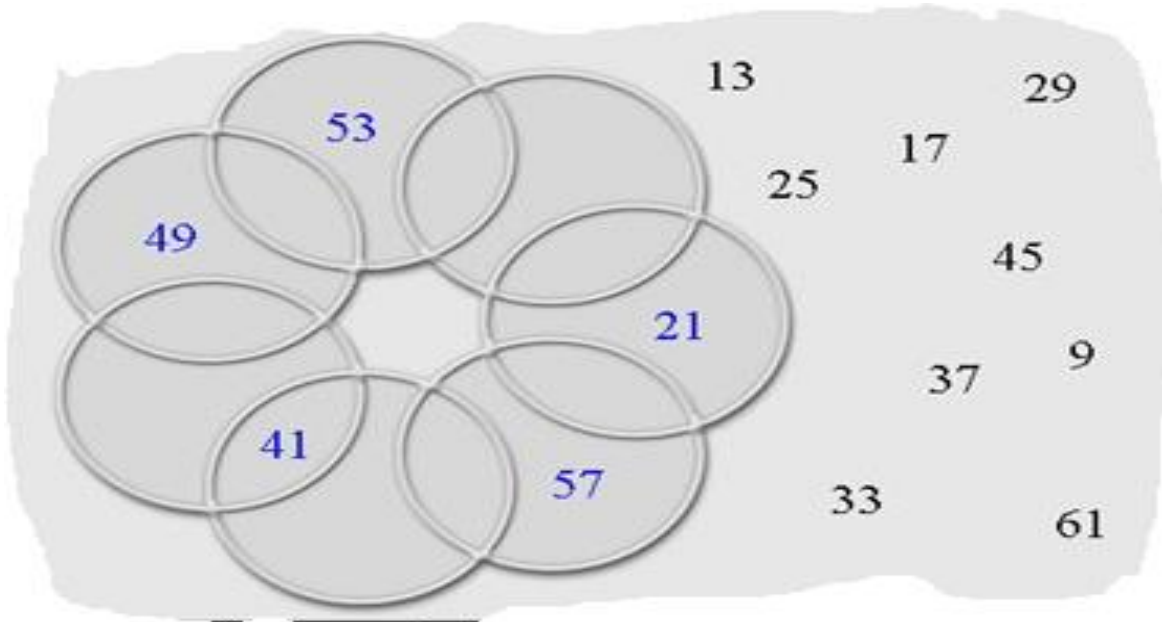
0	1	1	1	2	3	3	4	5
6	6	9	9	9	9	11	40	42
45	54							

NUMBER DIAGRAM PUZZLE

- Arrange the numbers 0 to 9 in the circles so that no two consecutive numbers are connected by a straight line.



Make every circle add up to 99



NUMBRIX

- ❖ Fill the grid with the numbers 1 to 81 in such that they make a path of consecutive numbers in sequence. You can move horizontally or vertically, but not diagonally.

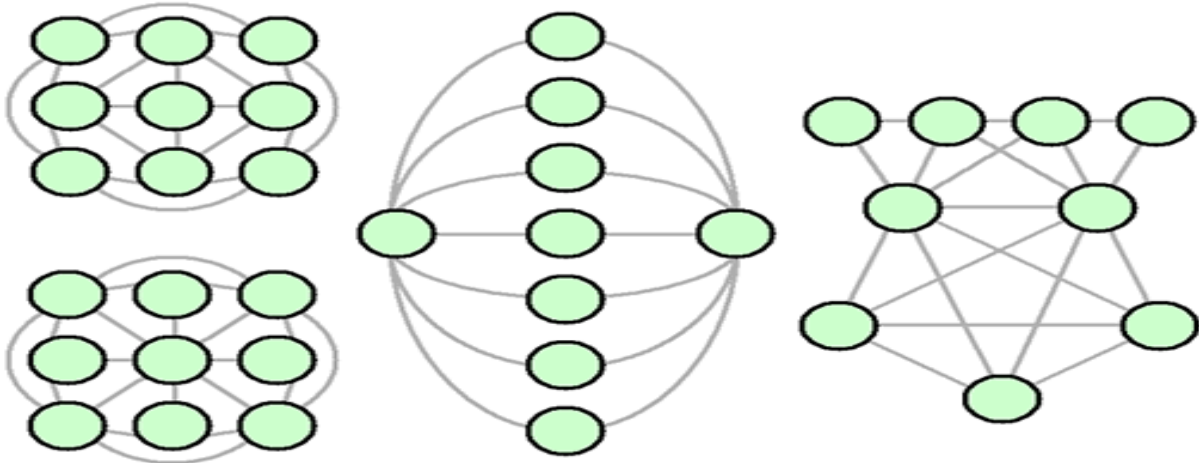
	64		58			55		49
			13					
67		61			10		52	
			15	8				46
71		17				43		
			1		5			
	74			21			32	
		78	23		29			
81		79				27		35

SUDOKU

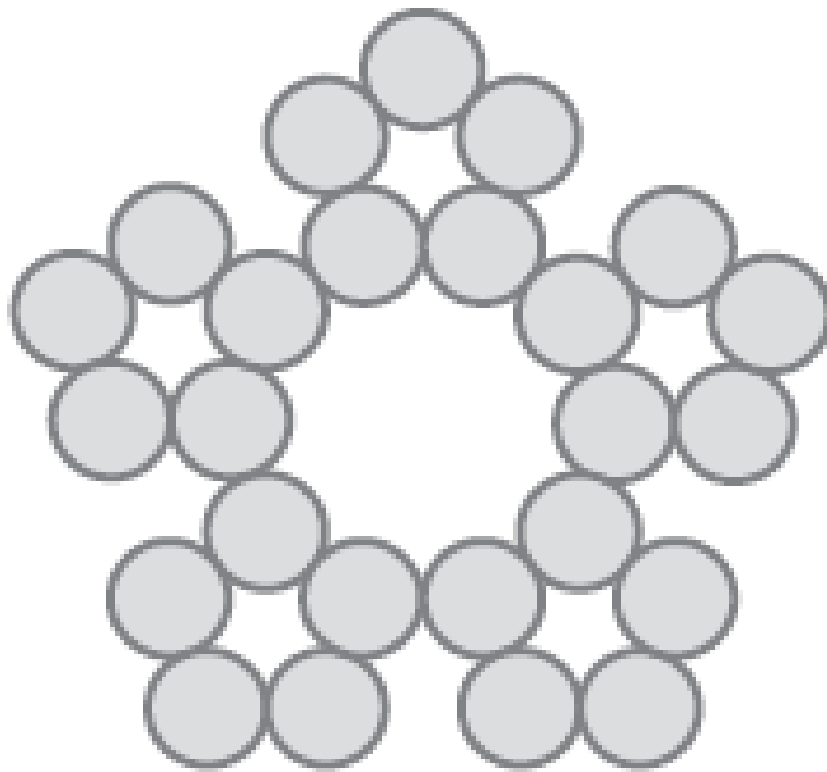
				7				
	6		8		4		3	
8						6	2	
			2		1			7
1		3				8		5
9			5		8			
	9	4						6
	5		1		9		8	
				4				

GEOMETRIC PUZZLES

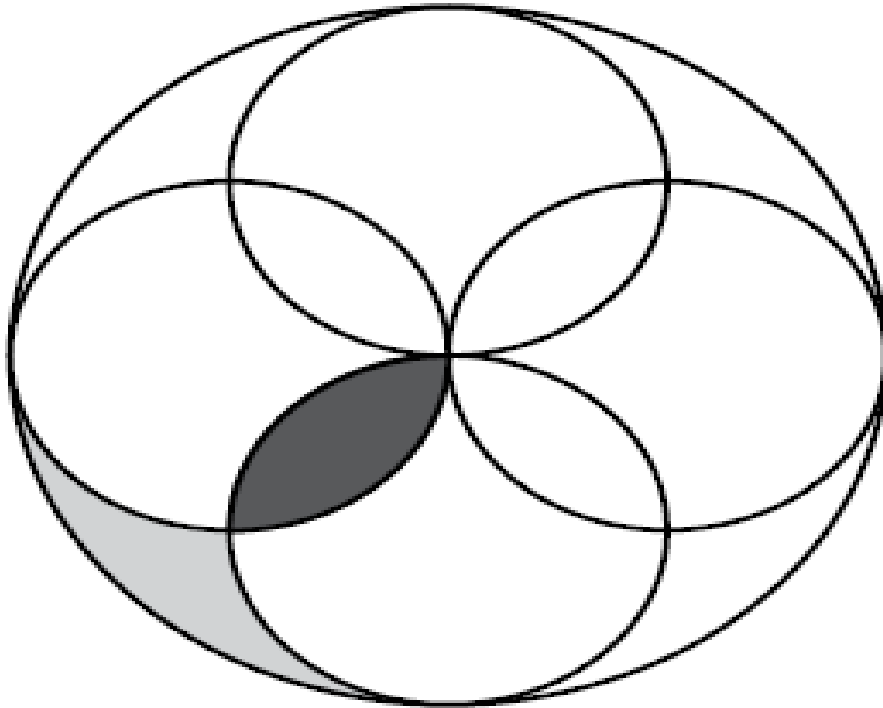
❖ Which of the following diagram is possible to draw without taking off the pen from the paper and without over drawing on the same line ?



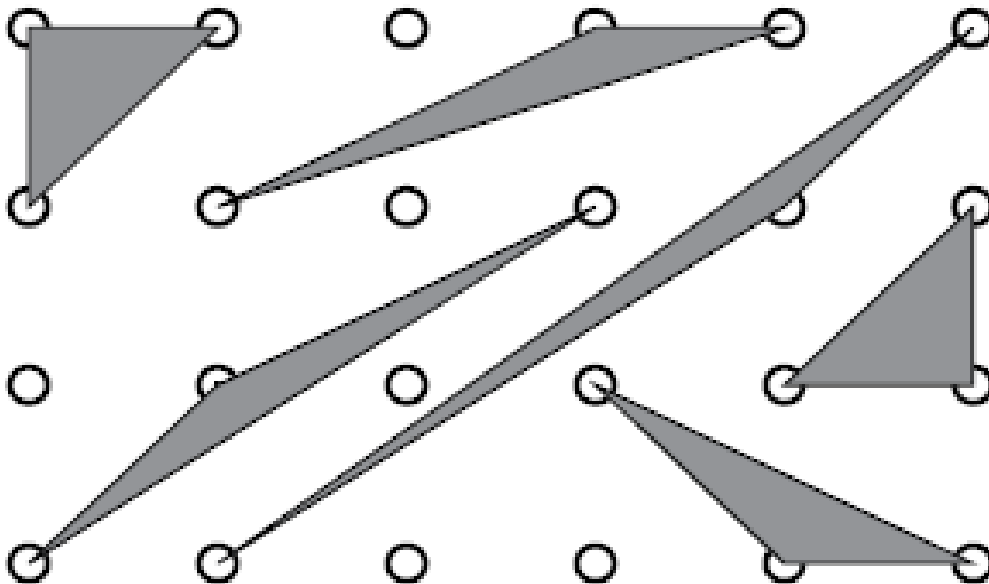
❖ How many straight lines of 4 circles are there



❖ Which is larger the light area or the dark area

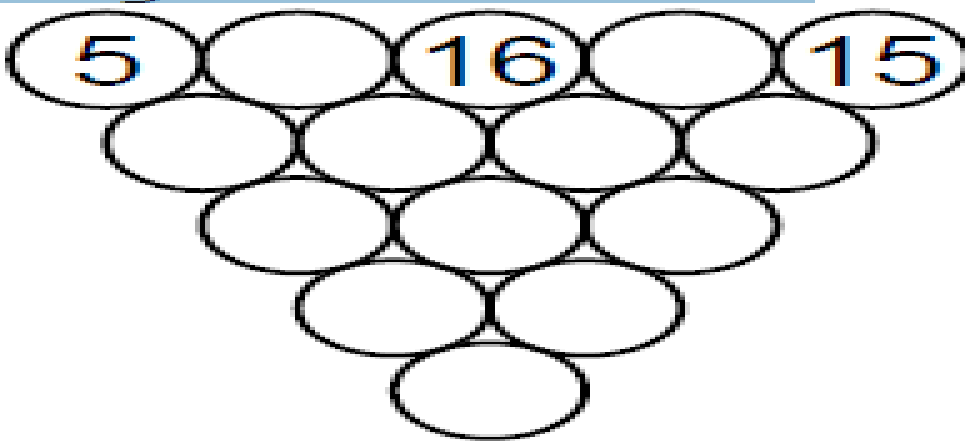


Which triangle has the greater area

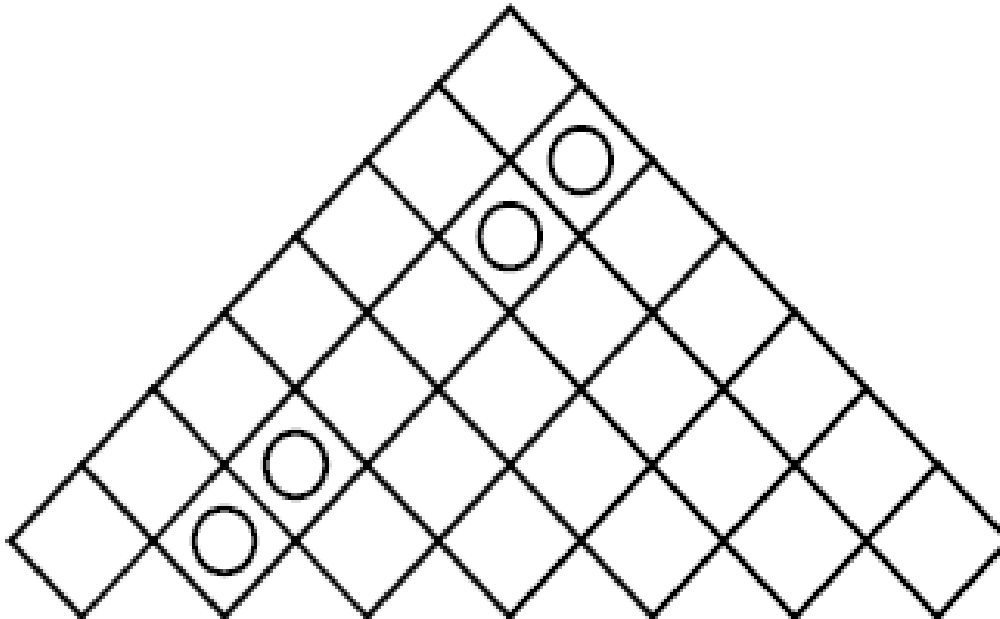


BRAIN TEASERS

A superstitious pool player didn't like 8-balls, so he had a 16-ball specially made. When he racked the balls up, he always arranged them so that each ball was the difference of the 2 balls above it. Can you find the arrangement he used?



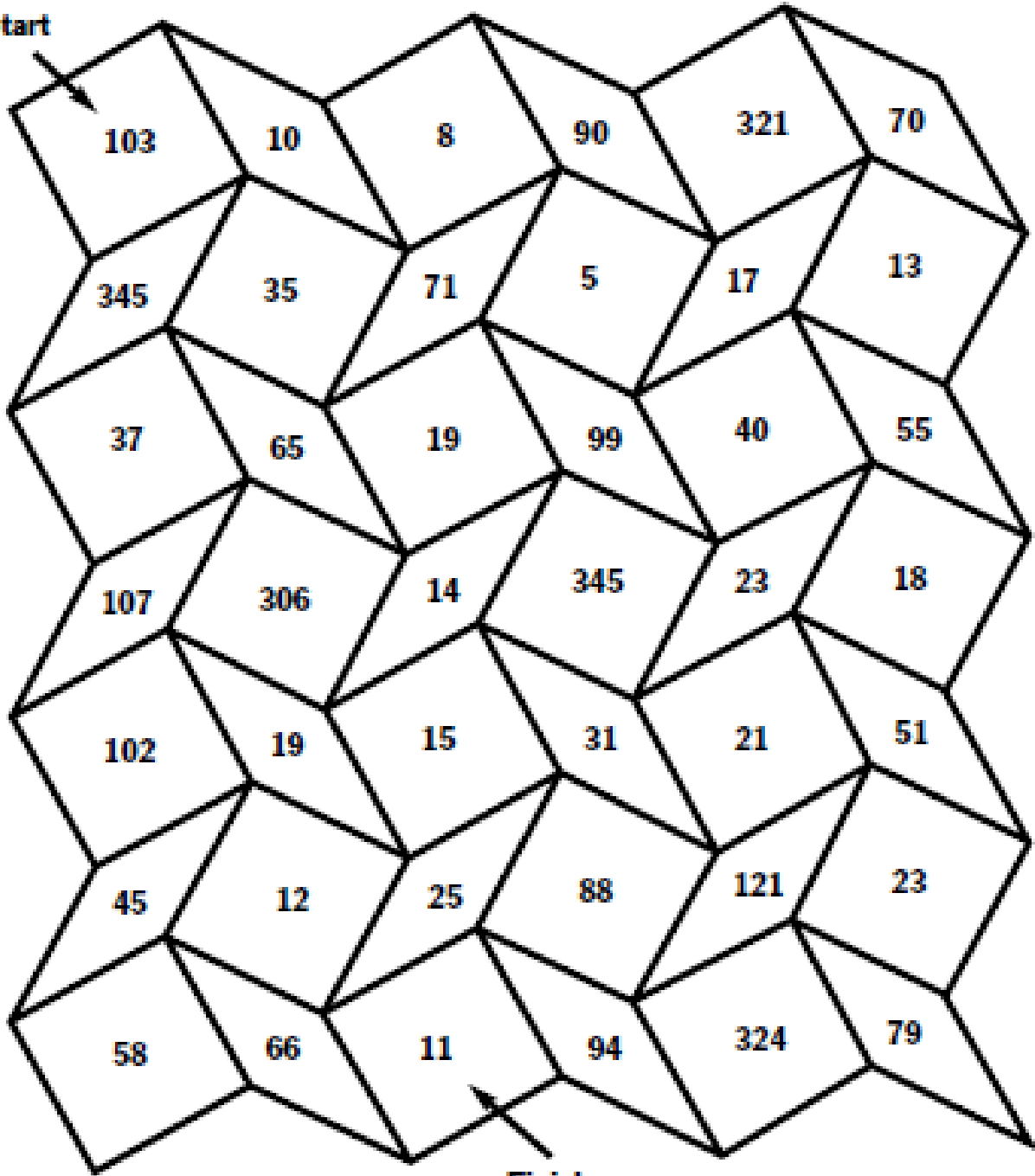
- ❖ In a triangular garden, 4 plants are in a row. Add 6 more plants to make 5 rows of 4 plants. Each plant must be in one of the square plots.



CHOOSE YOUR PATH

Walk through the block which is not dividible by 2 , 3 , or 4 to reach the finish.

Start



Finish