



Mathematics Task Centre

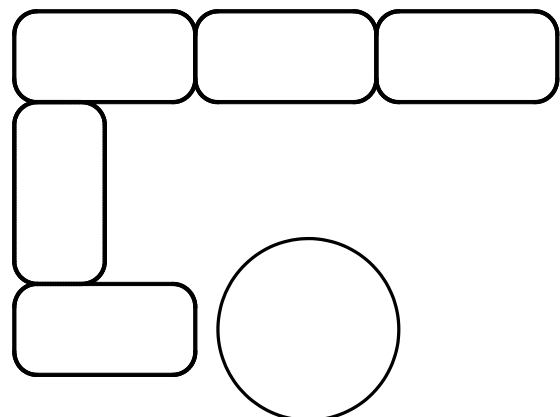
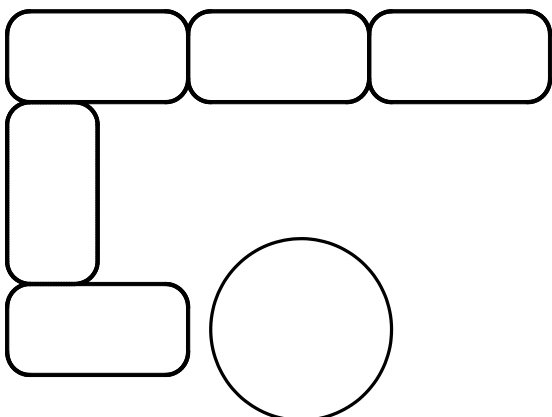
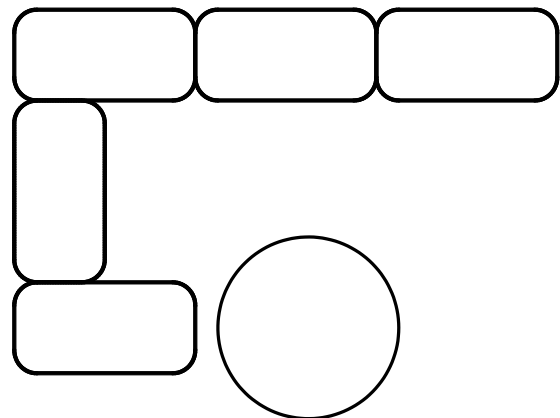
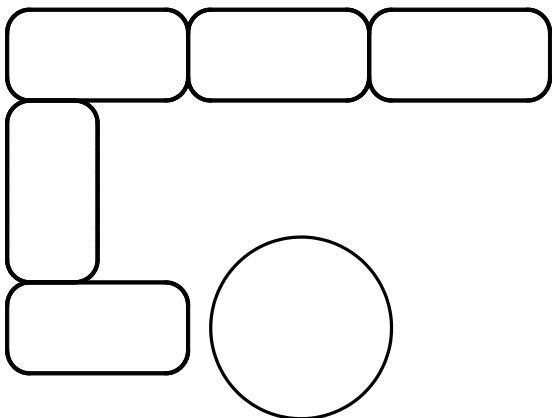
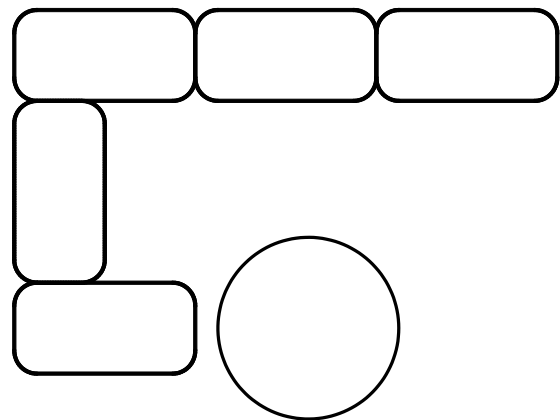
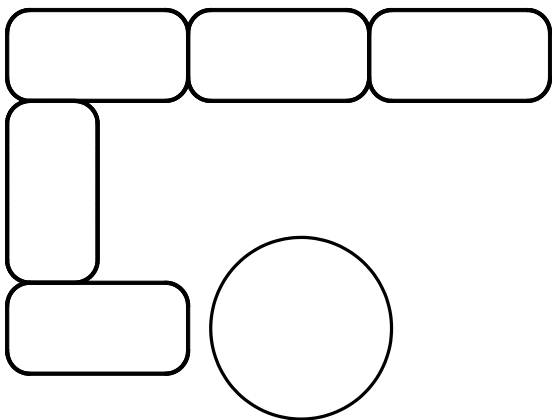
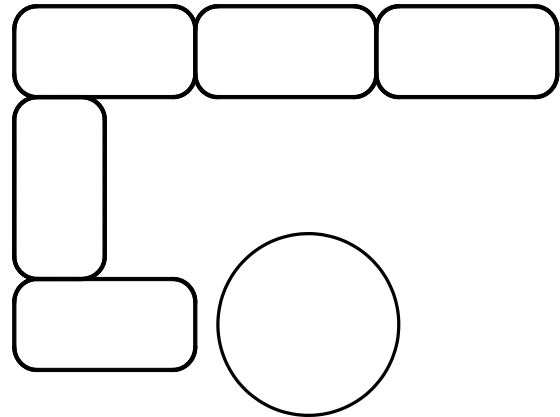
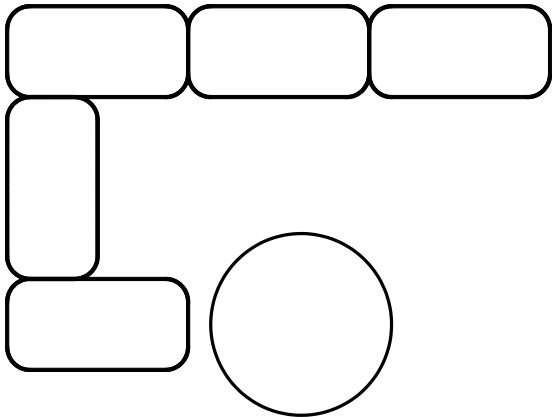
RECORDING SHEETS

Recording the Investigation

Some tasks require worksheets. These are also freely available at
<http://www.mathematicscentre.com/taskcentre/docs.htm>

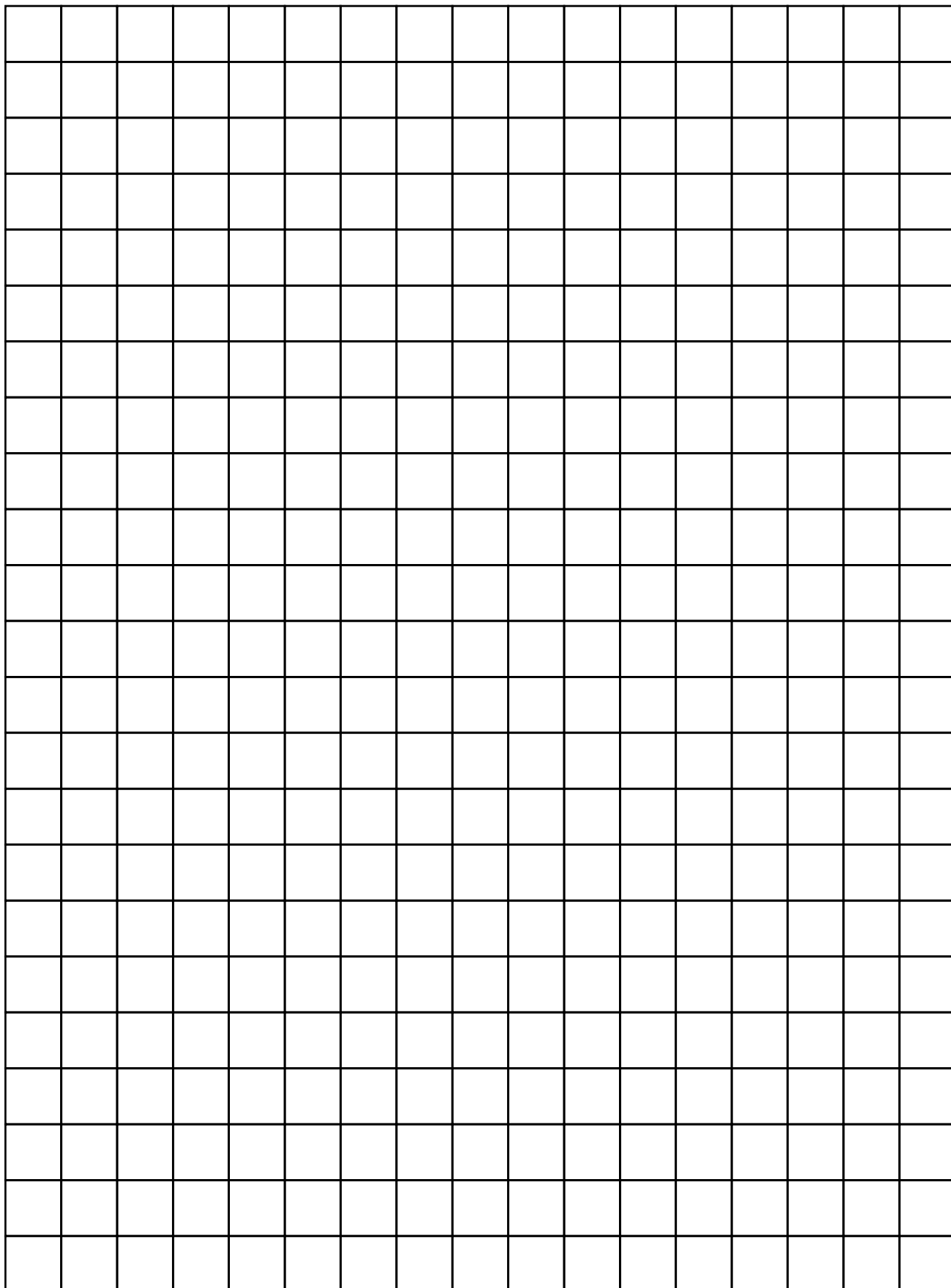
DOMINO TRAILS

NAME(S):CLASS:



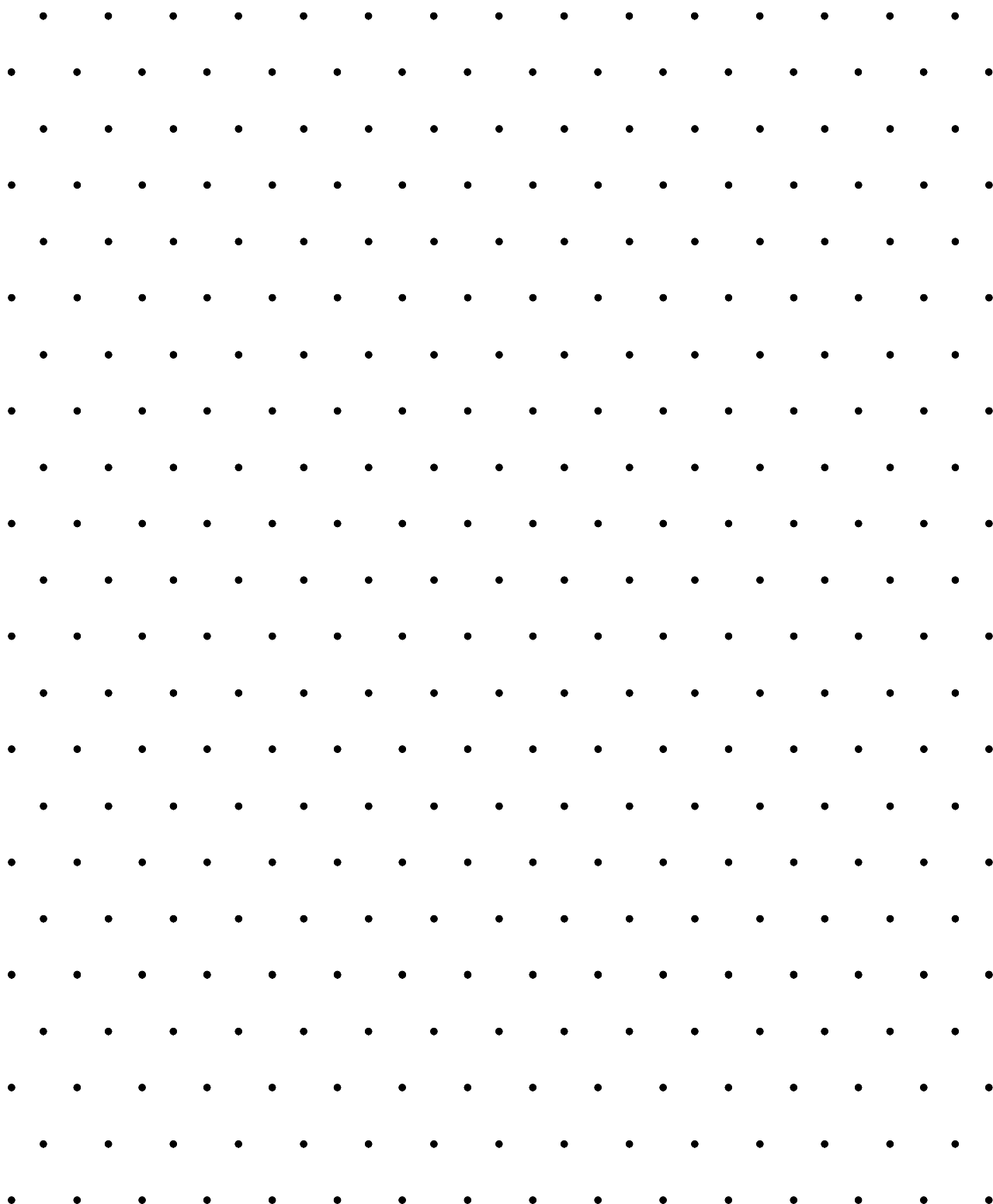
SQUARES AROUND SQUARES

NAME(S):CLASS:



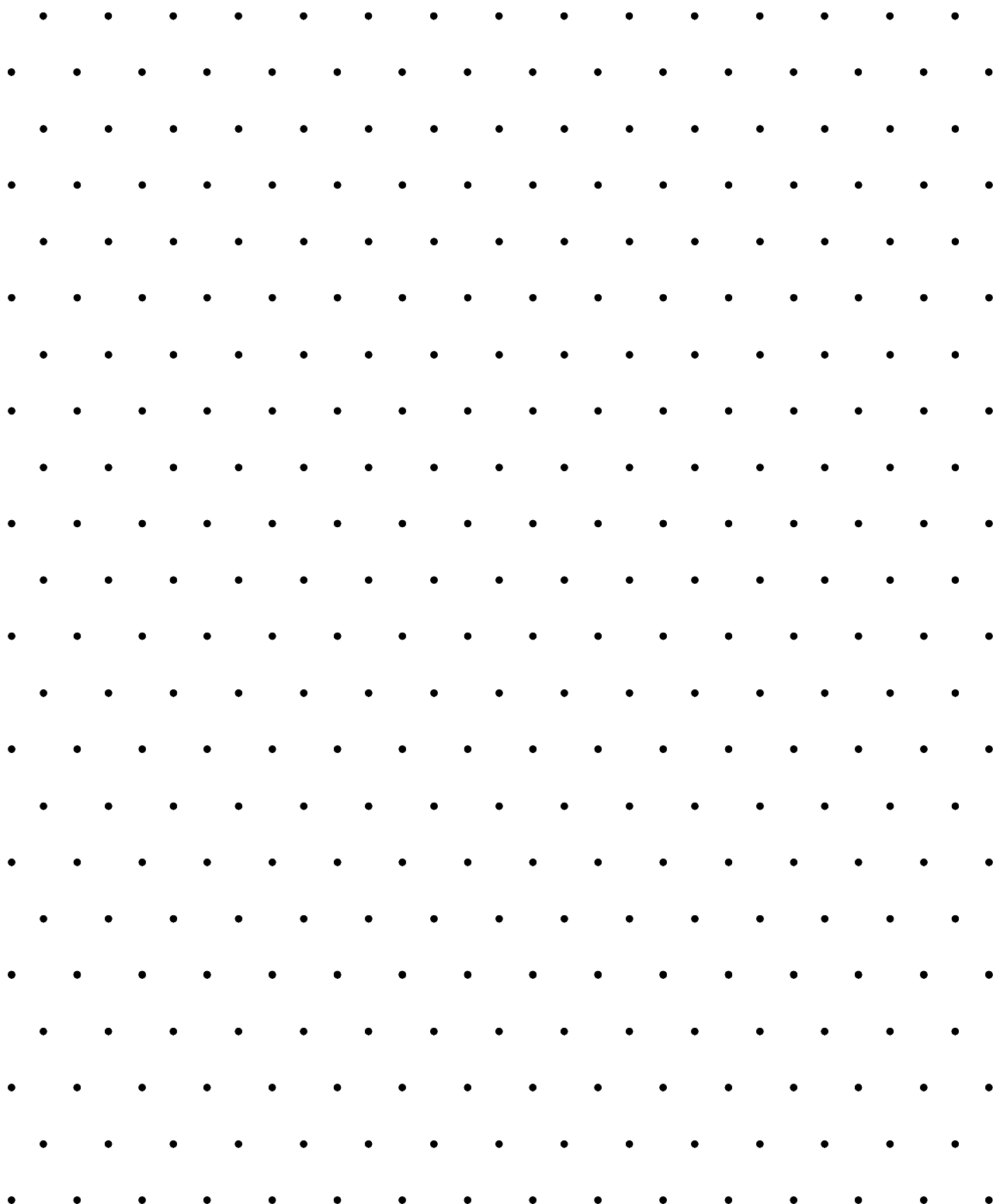
TRIANGLES AROUND TRIANGLES

NAME(S):CLASS:



HOW MANY TRIANGLES?

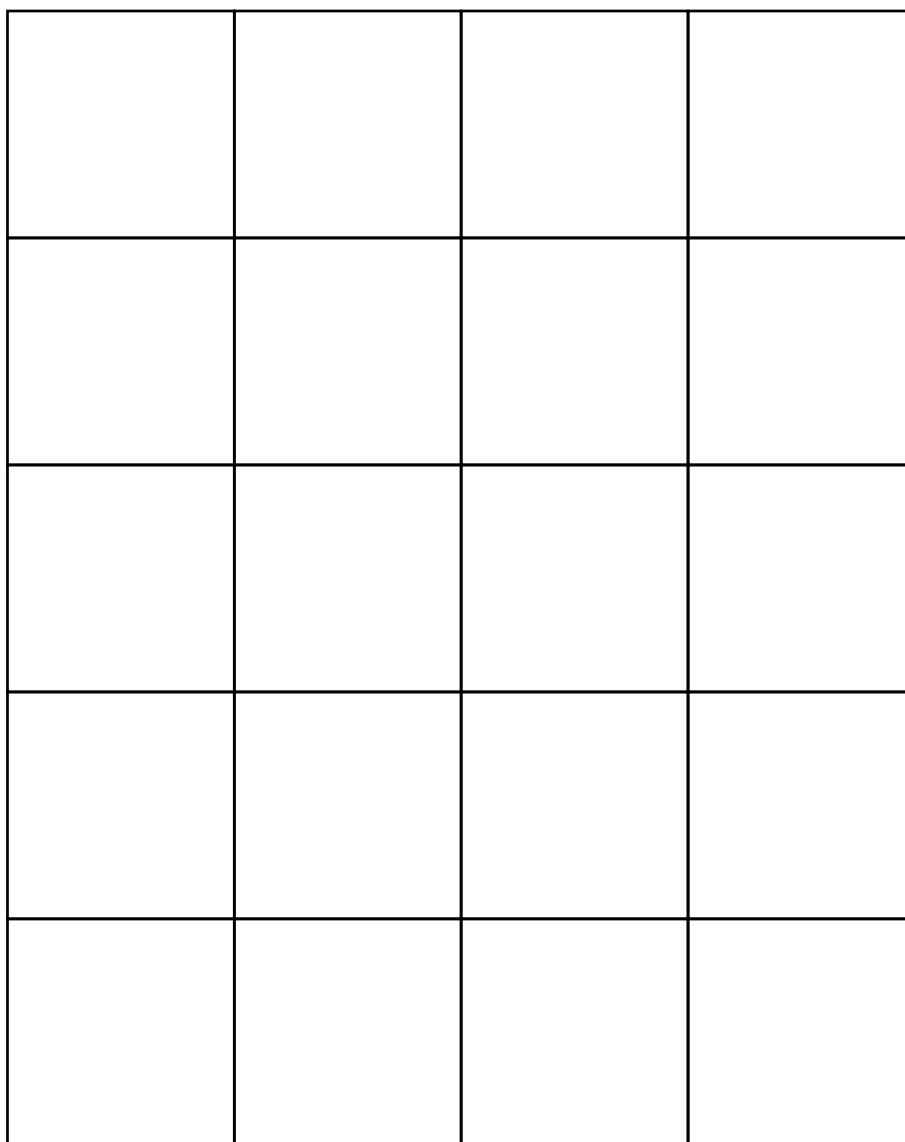
NAME(S):CLASS:



SHAPE ALGEBRA

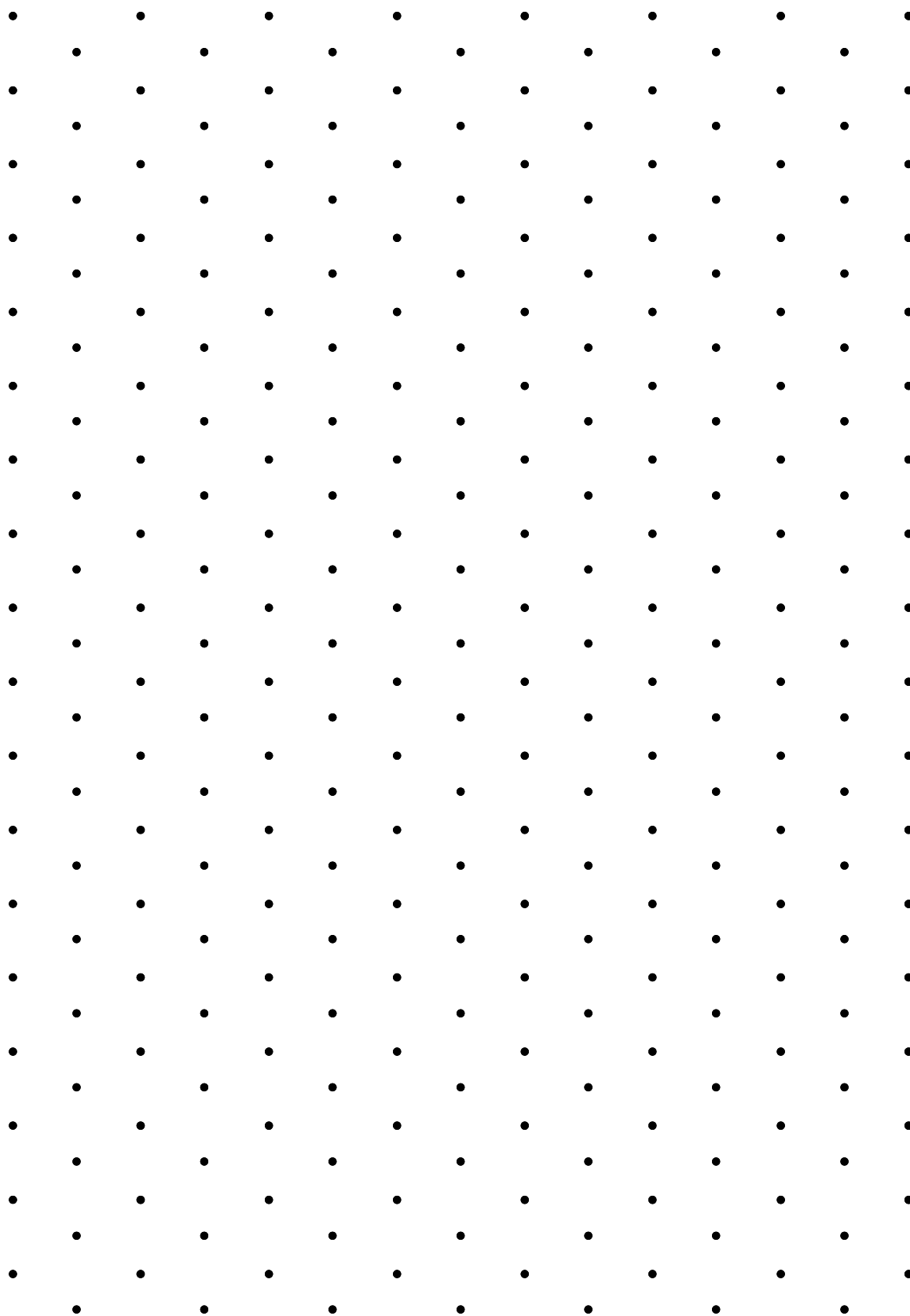
NAME(S):CLASS:

Each square is the same size as the shape named x .
The sheet can help you work out the area of each shape.
You might trace the shapes and then remove them to work out the area.



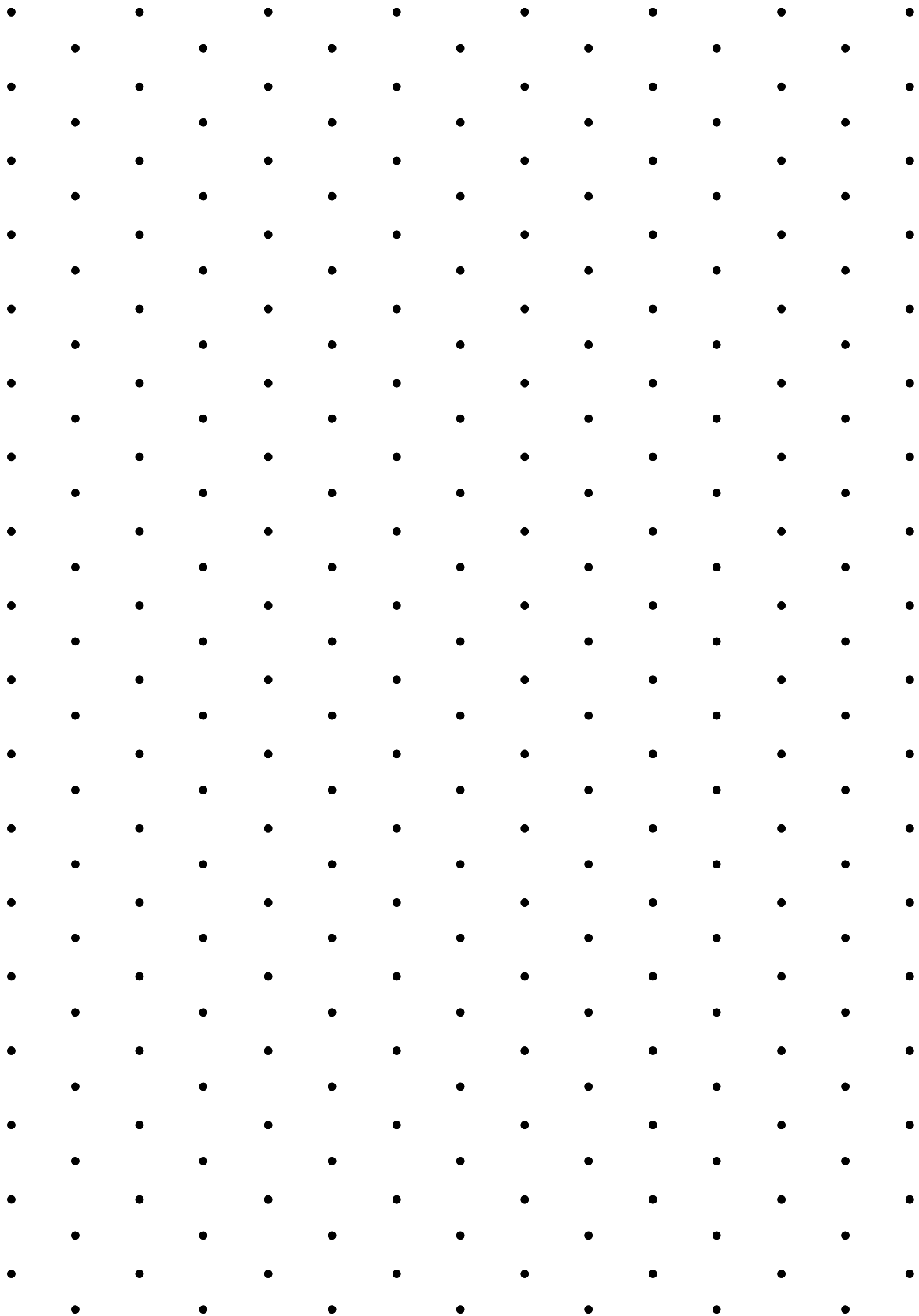
MAKING SOLIDS

NAME(S): CLASS:



TRICUBES

NAME(S):CLASS:



SYMMETRIC SHAPES

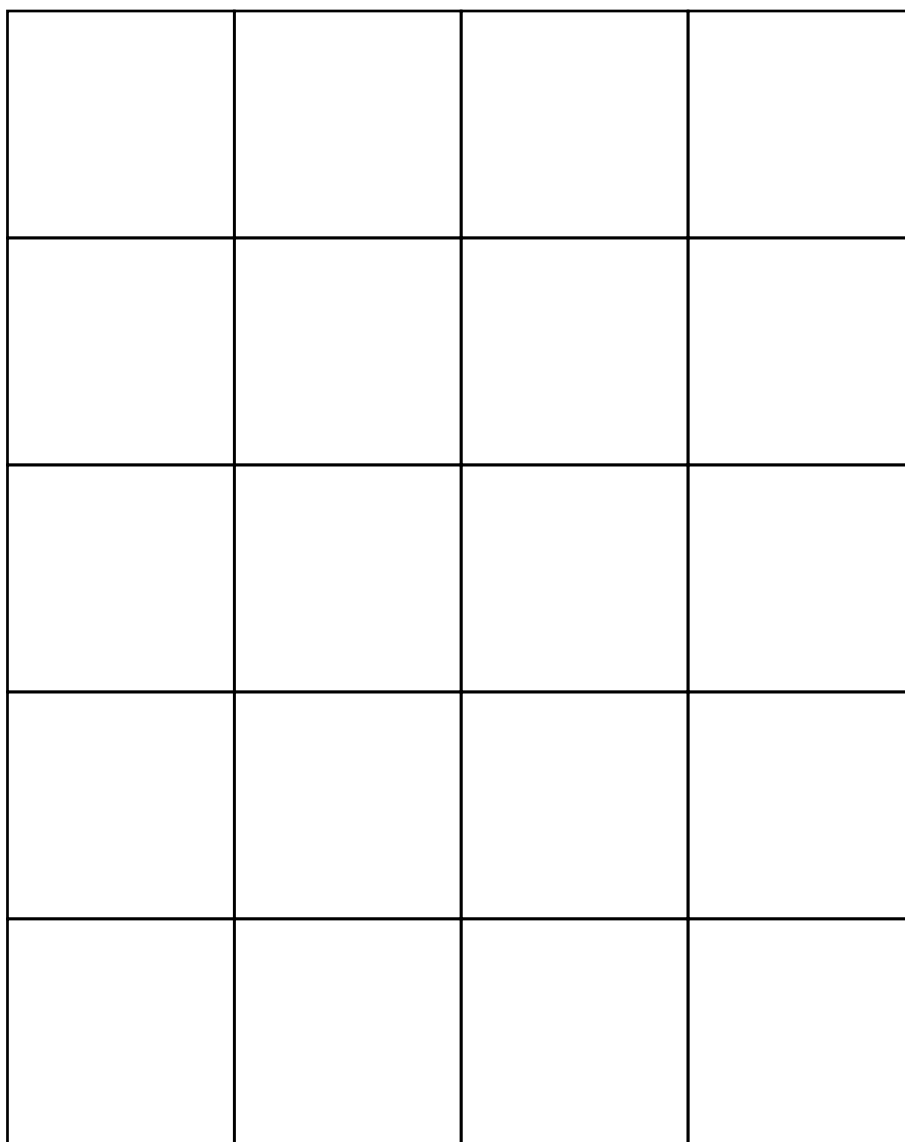
NAME(S):CLASS:

[illegible]

ALGEBRA THROUGH GEOMETRY

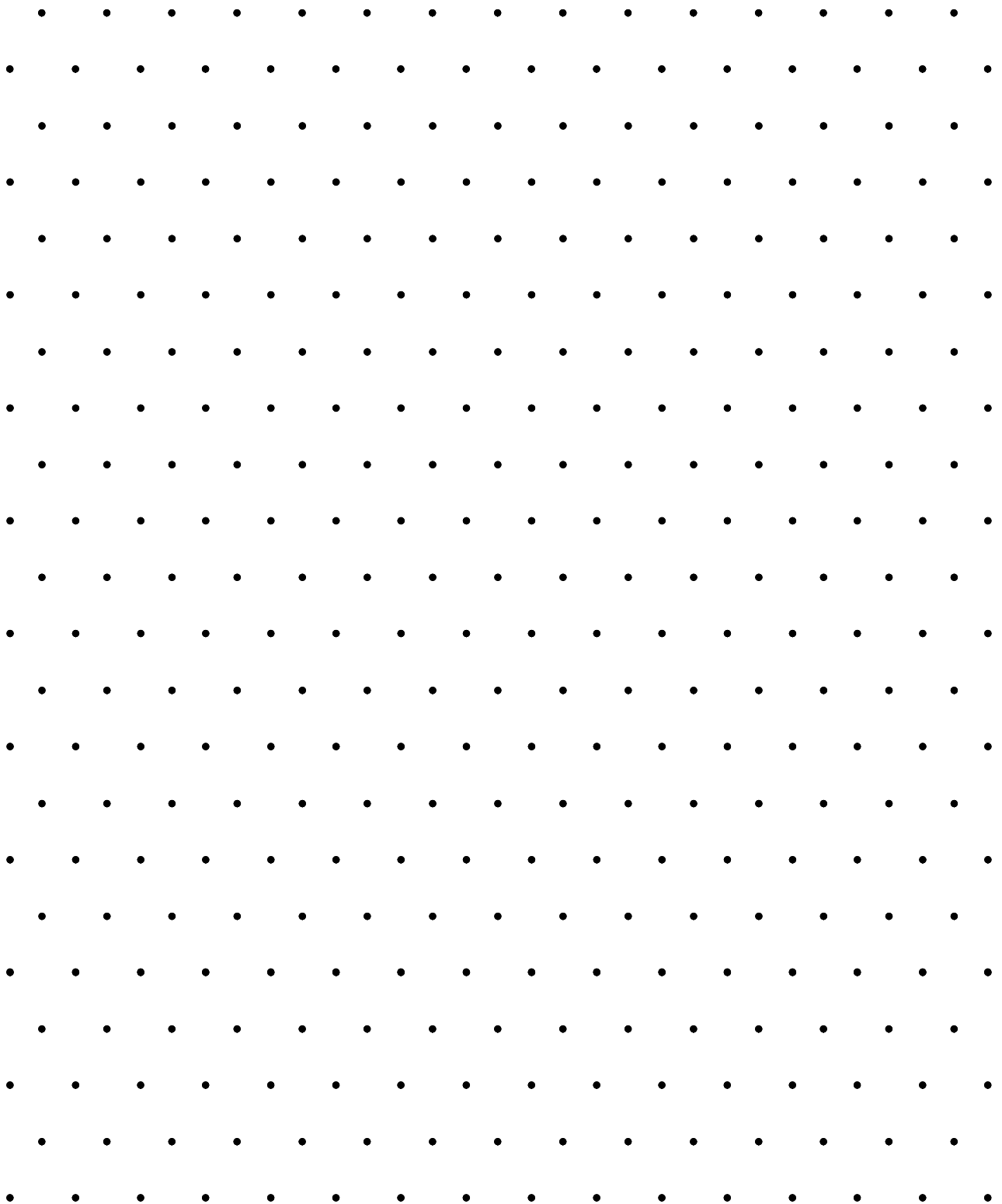
NAME(S):CLASS:

Each square is the same size as the shape named x .
The sheet can help you work out the area of each shape.
You might trace the shapes and then remove them to work out the area.



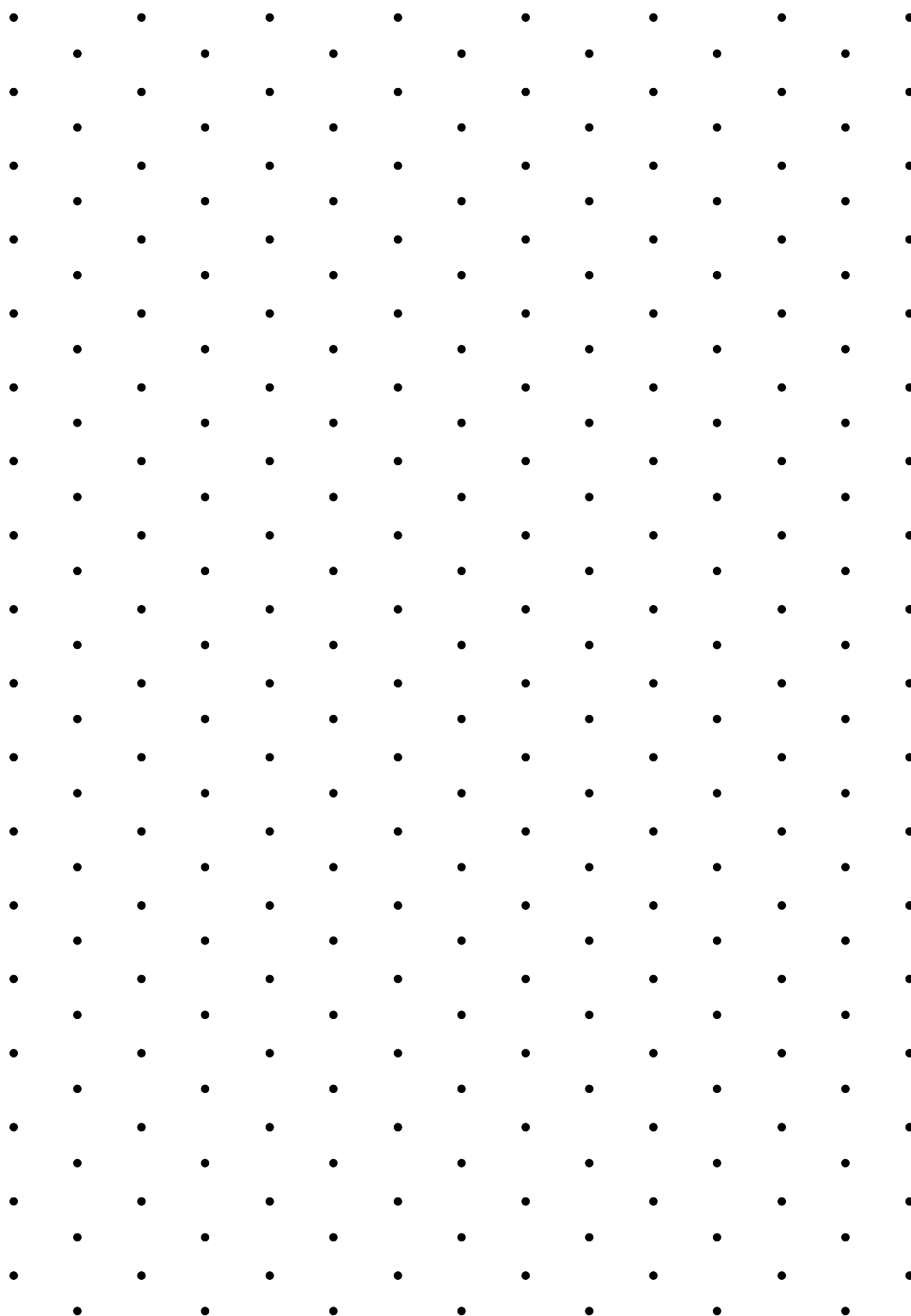
WHAT'S IT WORTH?

NAME(S):CLASS:



TRICUBE CONSTRUCTIONS A

NAME(S):CLASS:



RACETRACK RESULTS

NAME(S):CLASS:

Racetrack One

	First Try	Second Try	Third Try
Jockey A			
Jockey B			

Racetrack Two

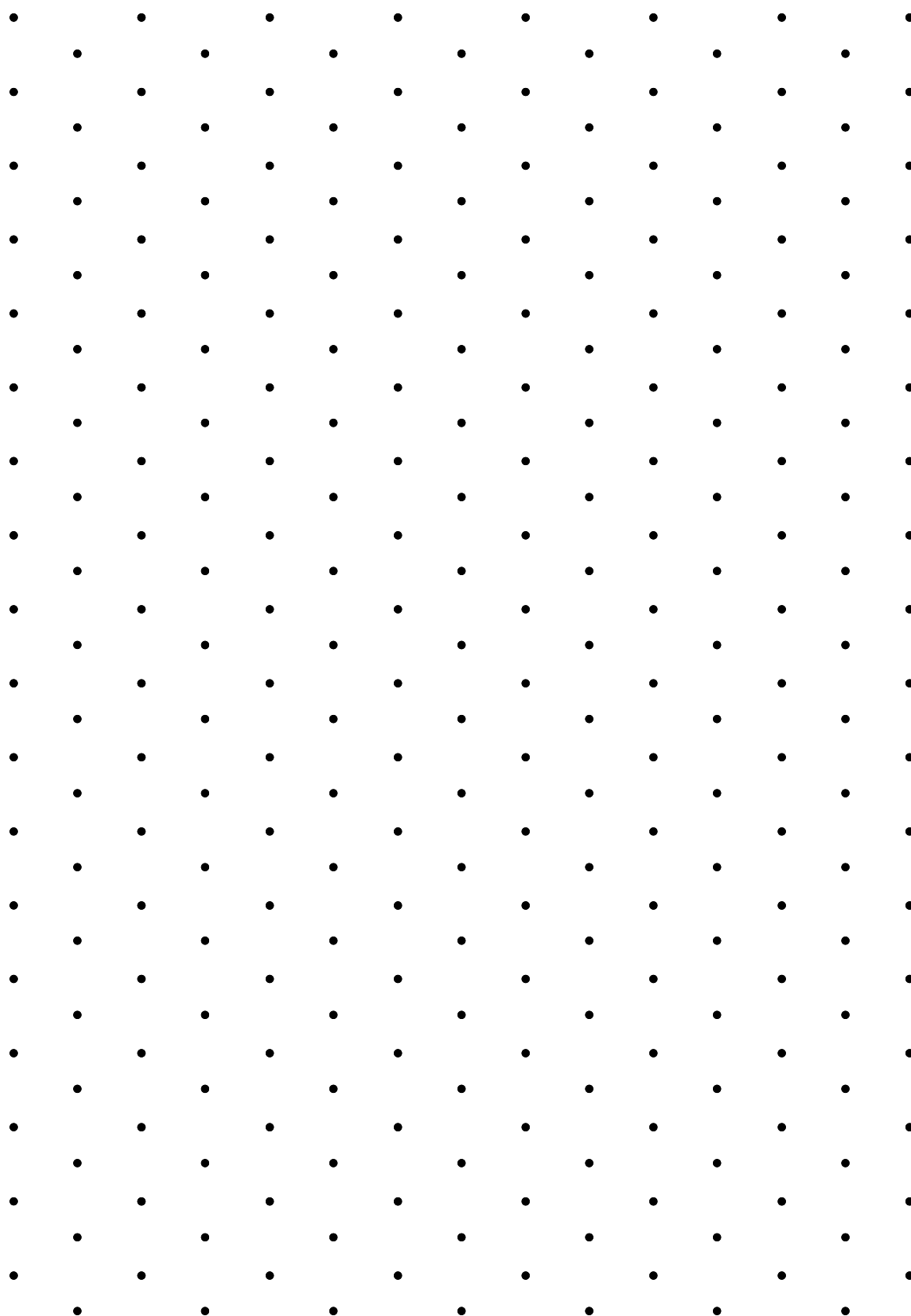
	First Try	Second Try	Third Try
Jockey A			
Jockey B			

Racetrack Three

	First Try	Second Try	Third Try
Jockey A			
Jockey B			

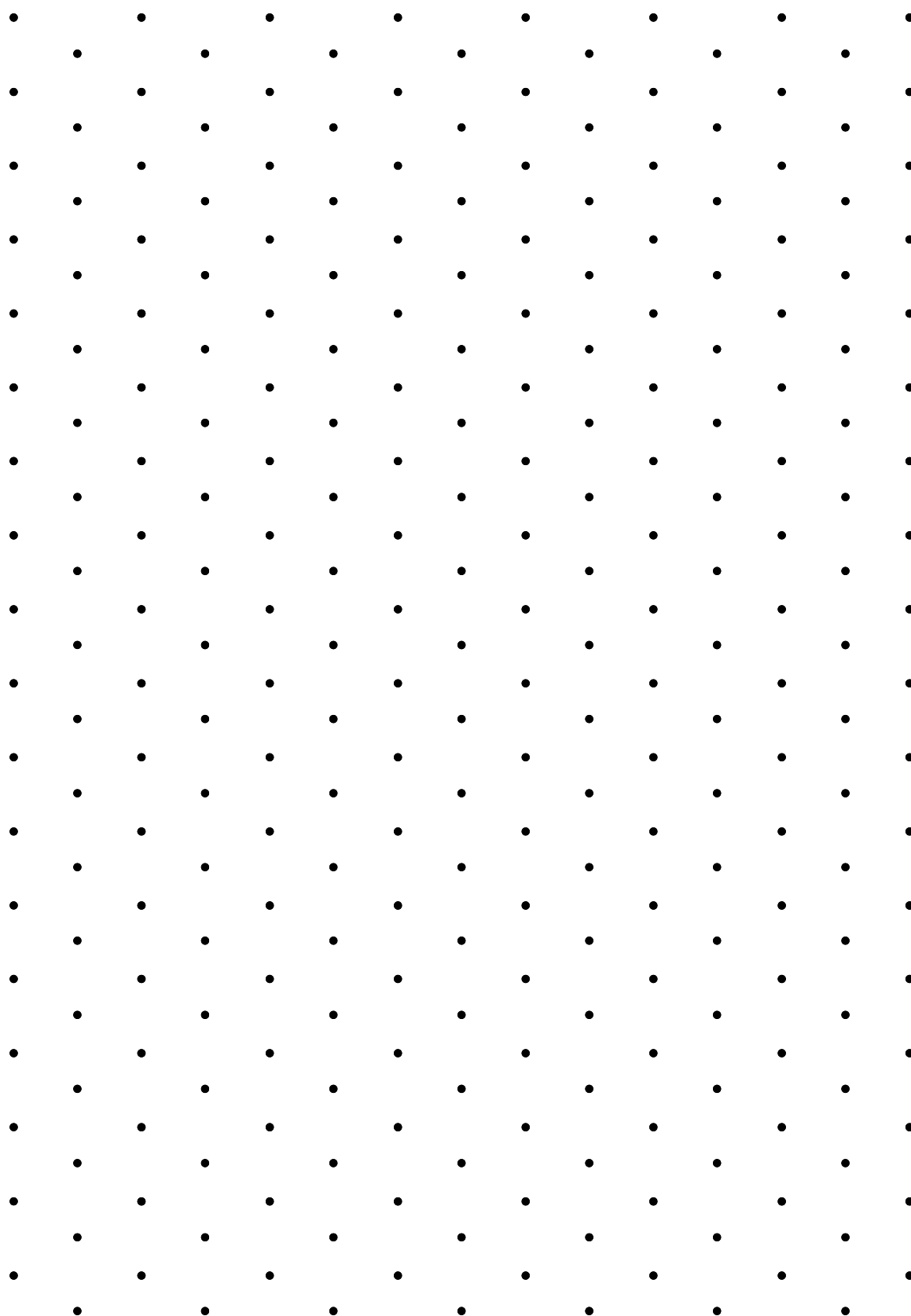
TRICUBE CONSTRUCTIONS B

NAME(S):CLASS:



FOUR CUBE HOUSES

NAME(S):CLASS:



HOW MANY SQUARES?

NAME(S): CLASS:

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

Mathematics Task Centre

Task 108

Reproducible Page

HOW MANY SQUARES?

NAME(S): CLASS:

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

Mathematics Task Centre

Task 108

Reproducible Page

HOW MANY SQUARES?

NAME(S): CLASS:

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

Mathematics Task Centre

Task 108

Reproducible Page

HOW MANY SQUARES?

NAME(S): CLASS:

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

Mathematics Task Centre

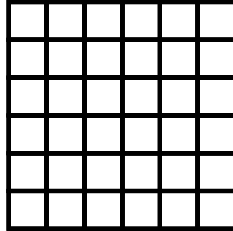
Task 108

Reproducible Page

SQUARE NUMBERS

NAME(S): CLASS:

1. Colour the grid to show how the squares with areas from 1 to 25 fit inside this 36 square.

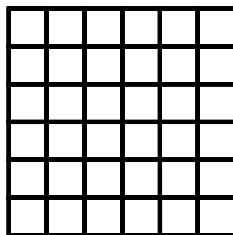


2. $36 = \dots\dots\dots$
3. The 20th Square Number would be:
Explain your reasons here.

SQUARE NUMBERS

NAME(S): CLASS:

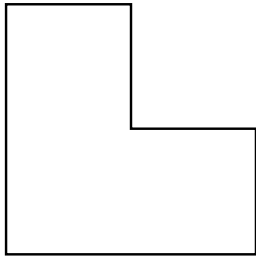
1. Colour the grid to show how the squares with areas from 1 to 25 fit inside this 36 square.



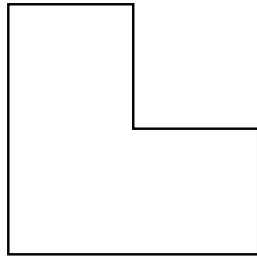
2. $36 = \dots\dots\dots$
3. The 20th Square Number would be:
Explain your reasons here.

DIVIDING SHAPES

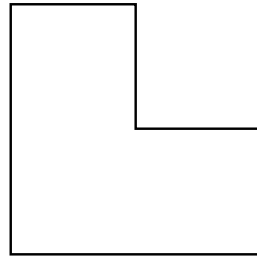
NAME(S):CLASS:



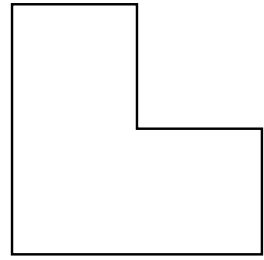
3 identical shapes



2 identical shapes



6 identical shapes



4 identical shapes

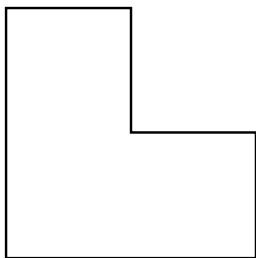
Mathematics Task Centre

Task 115

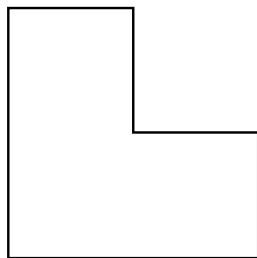
Reproducible Page

DIVIDING SHAPES

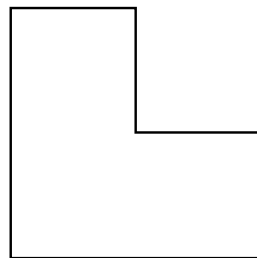
NAME(S):CLASS:



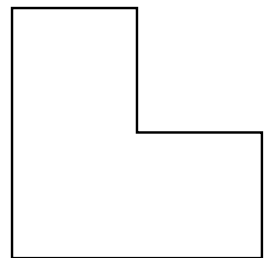
3 identical shapes



2 identical shapes



6 identical shapes



4 identical shapes

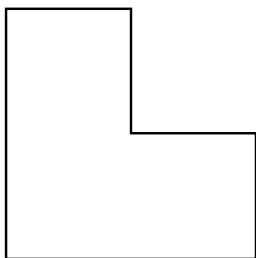
Mathematics Task Centre

Task 115

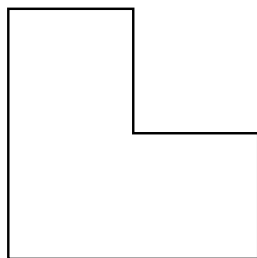
Reproducible Page

DIVIDING SHAPES

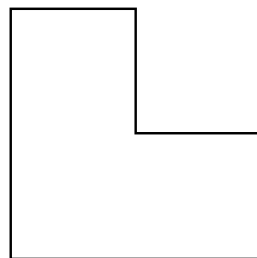
NAME(S):CLASS:



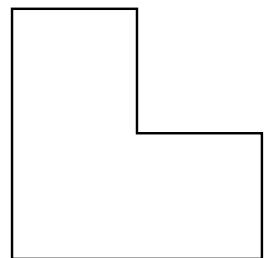
3 identical shapes



2 identical shapes



6 identical shapes



4 identical shapes

Mathematics Task Centre

Task 115

Reproducible Page

WIN AT THE FAIR

Sheet Number

NAME(S): CLASS:

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	\$1	\$2	\$3	\$4	\$5
Tally for							
Your Totals							
Totals So Far							

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	\$1	\$2	\$3	\$4	\$5
Tally for							
Your Totals							
Totals So Far							

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	\$1	\$2	\$3	\$4	\$5
Tally for							
Your Totals							
Totals So Far							

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	\$1	\$2	\$3	\$4	\$5
Tally for							
Your Totals							
Totals So Far							

FAMOUS MATHEMATICIANS

NAME(S): CLASS:

LOOK FOR THESE FAMOUS NAMES IN THE PUZZLE

AGNESI, Maria Gaetana	1718 - 1799	HYPATIA	c. 370 - 415A.D.
DEDEKIND, Richard	1831 - 1916	KOVALEVSKAYA, Sonya	1850 - 1891
DESCARTES, Rene	1596 - 1650	LOVELACE, Ada Byron	1815 - 1852
DU CHATELET, Emilie	1706 - 1749	NEWTON, Isaac	1642 - 1727
EUCLID	c. 300 B. C.	NOETHER, Emmy	1882 - 1935
EULER, Leonhard	1707 - 1783	PASCAL, Blaise	1623 - 1662
FERMAT, Pierre de	1601 - 1665	REIMANN, Georg	1826 - 1866
GAUSS, Karl F.	1777 - 1855	SOMERVILLE, Mary	1780 - 1872
GERMAIN, Sophie	1776 - 1831	YOUNG, Grace Chisholm	1868 - 1944

The list contains the names ofwomen and men?

Three interesting facts I found out about are:

1. _____
2. _____
3. _____

FAMOUS MATHEMATICIANS

NAME(S): CLASS:

LOOK FOR THESE FAMOUS NAMES IN THE PUZZLE

AGNESI, Maria Gaetana	1718 - 1799	HYPATIA	c. 370 - 415A.D.
DEDEKIND, Richard	1831 - 1916	KOVALEVSKAYA, Sonya	1850 - 1891
DESCARTES, Rene	1596 - 1650	LOVELACE, Ada Byron	1815 - 1852
DU CHATELET, Emilie	1706 - 1749	NEWTON, Isaac	1642 - 1727
EUCLID	c. 300 B. C.	NOETHER, Emmy	1882 - 1935
EULER, Leonhard	1707 - 1783	PASCAL, Blaise	1623 - 1662
FERMAT, Pierre de	1601 - 1665	REIMANN, Georg	1826 - 1866
GAUSS, Karl F.	1777 - 1855	SOMERVILLE, Mary	1780 - 1872
GERMAIN, Sophie	1776 - 1831	YOUNG, Grace Chisholm	1868 - 1944

The list contains the names ofwomen and men?

Three interesting facts I found out about are:

1. _____
2. _____
3. _____

SQUOUND

NAME(S):CLASS:

Total counters (T)	Counters in Square (S)	Counters in Circle (C)	Counters in Squound (Q)	1. I think the rule for finding the number of counters in the SQUOUND could be: _____ _____ _____ _____
12	8	9		
12				
12				
12				
12				

1. Write your rule as an equation which uses these symbols:
- the total number of counters used is called **T**
 - the number of counters in the square is called **S**
 - the number of counters in the circle is called **C**
 - the number of counters in the SQUOUND is called **Q**

SQUOUND

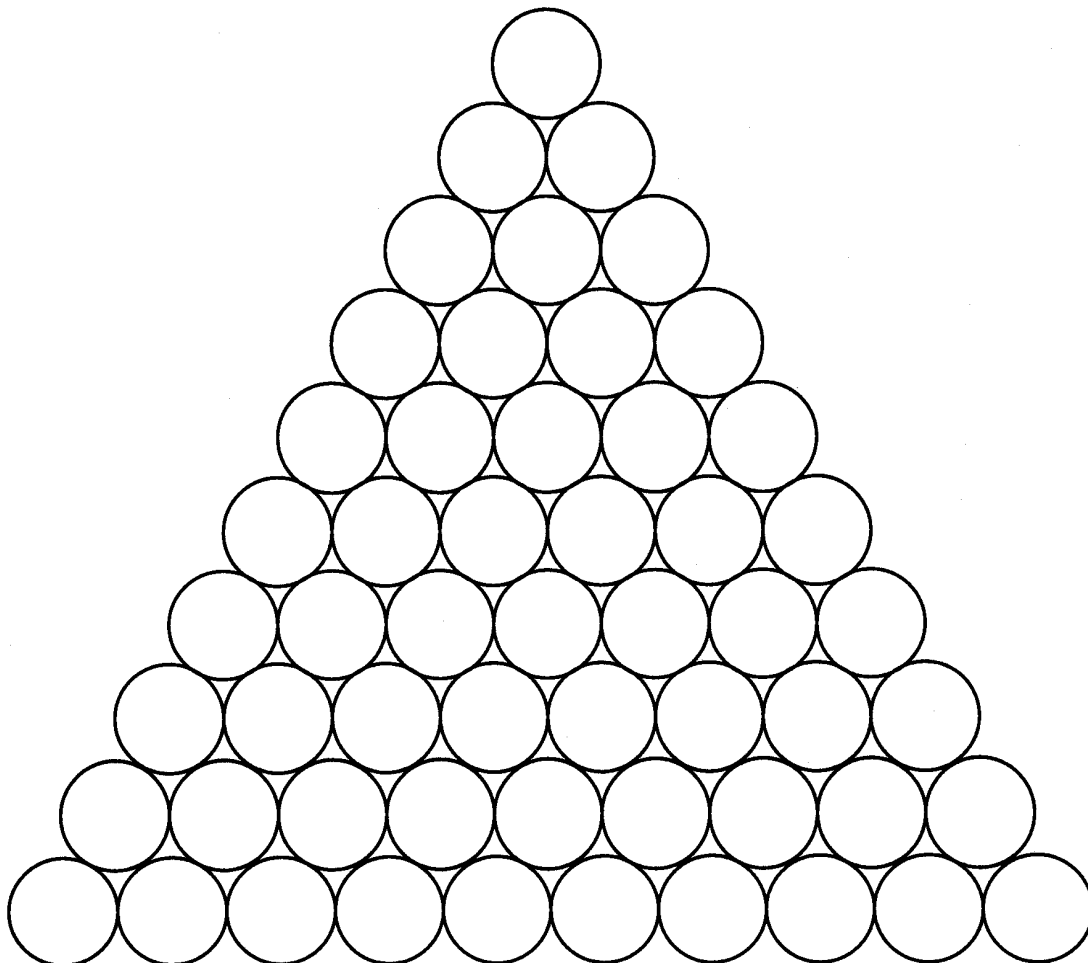
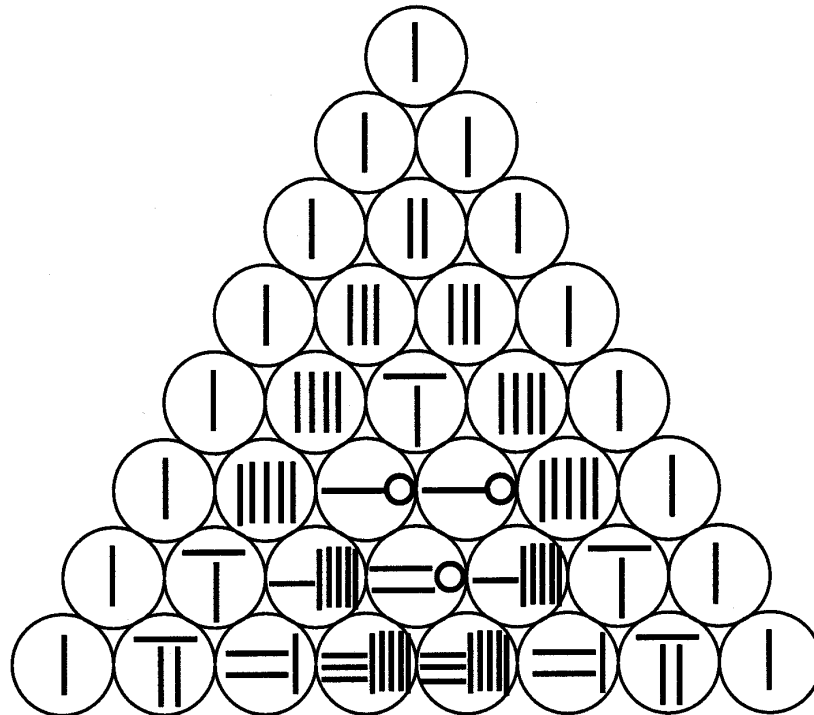
NAME(S):CLASS:

Total counters (T)	Counters in Square (S)	Counters in Circle (C)	Counters in Squound (Q)	1. I think the rule for finding the number of counters in the SQUOUND could be: _____ _____ _____ _____
12	8	9		
12				
12				
12				
12				

2. Write your rule as an equation which uses these symbols:
- the total number of counters used is called **T**
 - the number of counters in the square is called **S**
 - the number of counters in the circle is called **C**
 - the number of counters in the SQUOUND is called **Q**

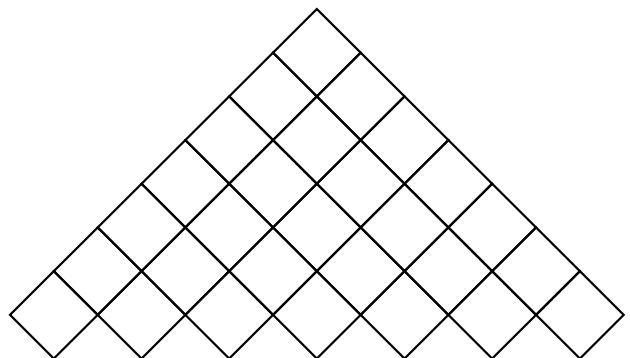
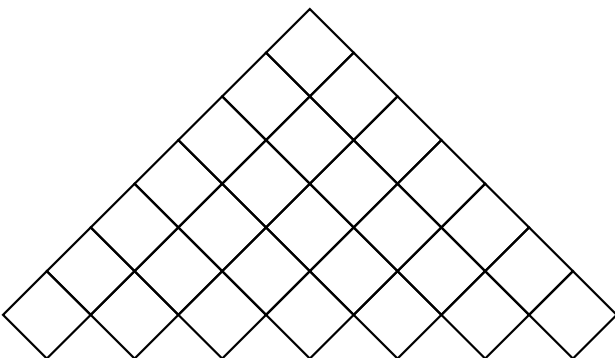
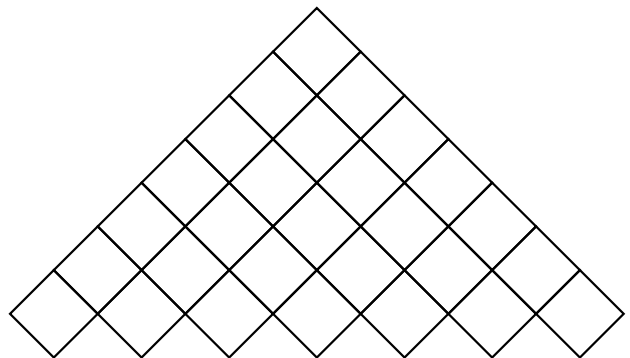
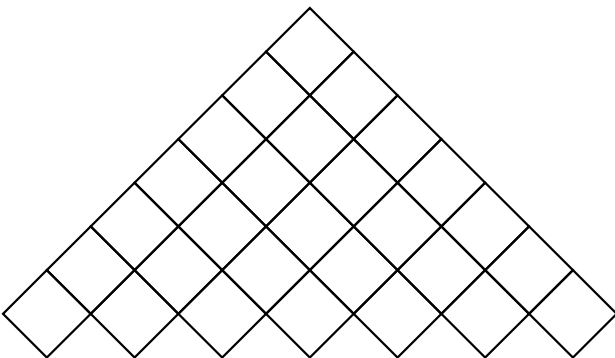
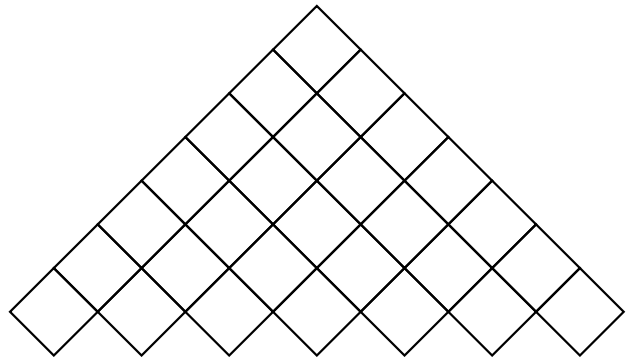
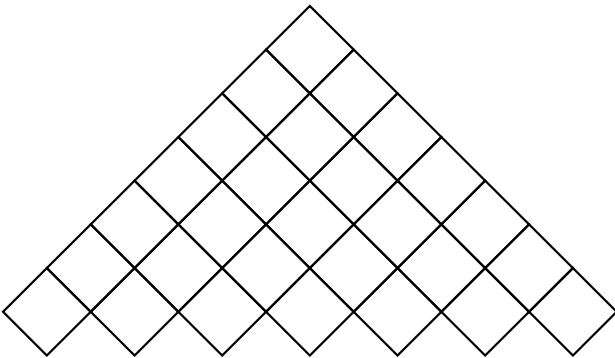
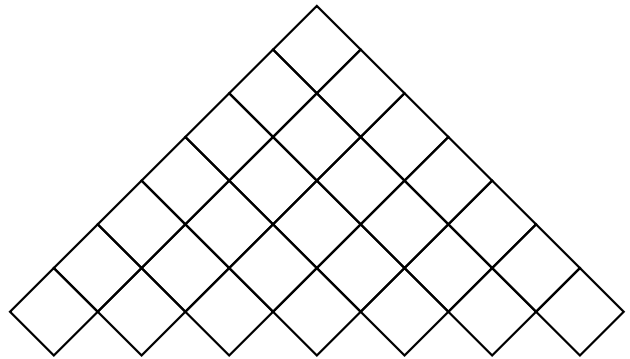
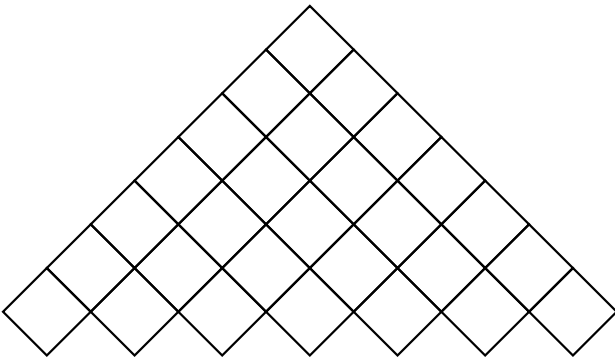
PASCAL'S TRIANGLE IN ASIA

NAME(S): CLASS:



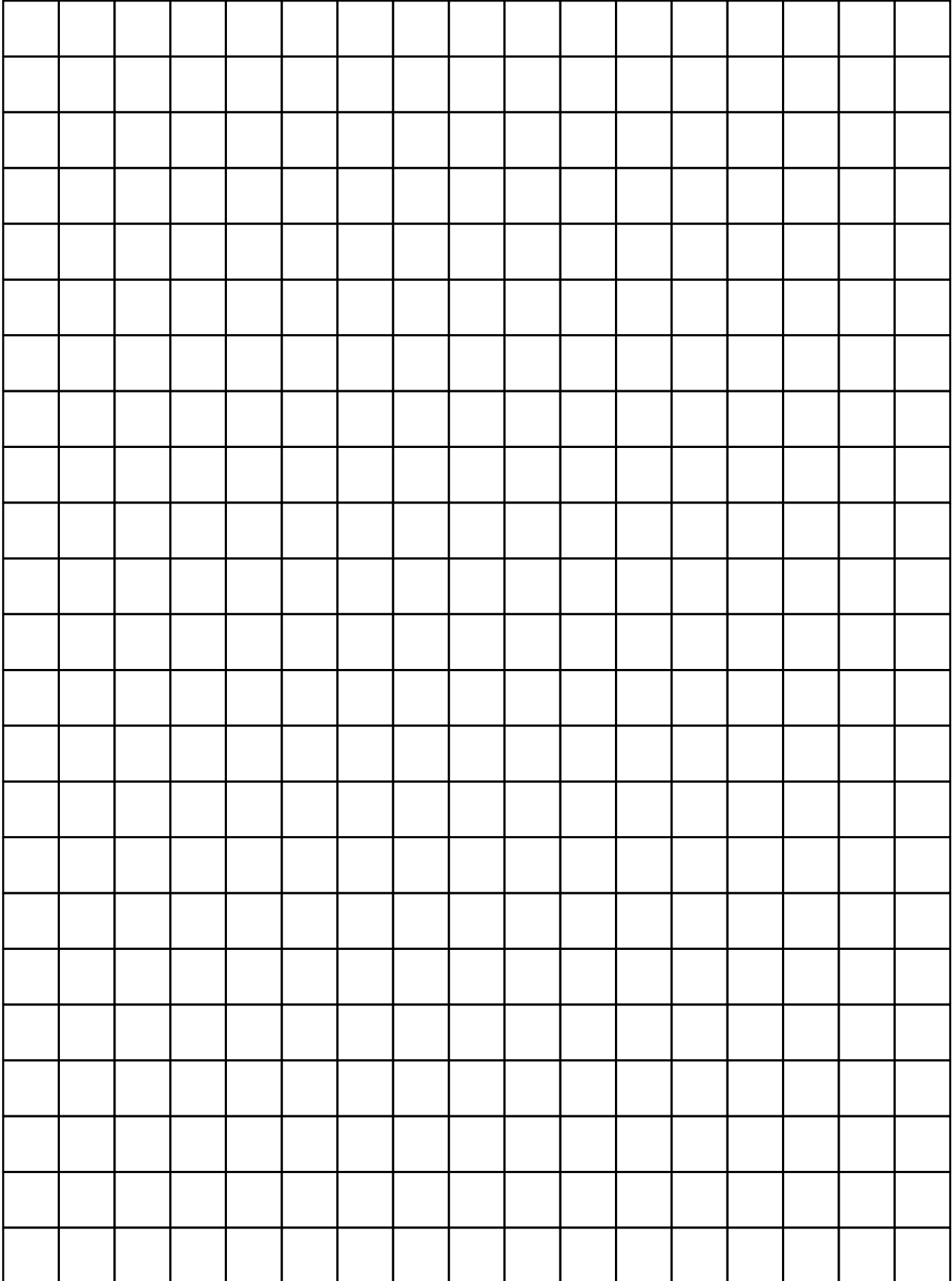
SYMMETRIC TILES

NAME(S): CLASS:



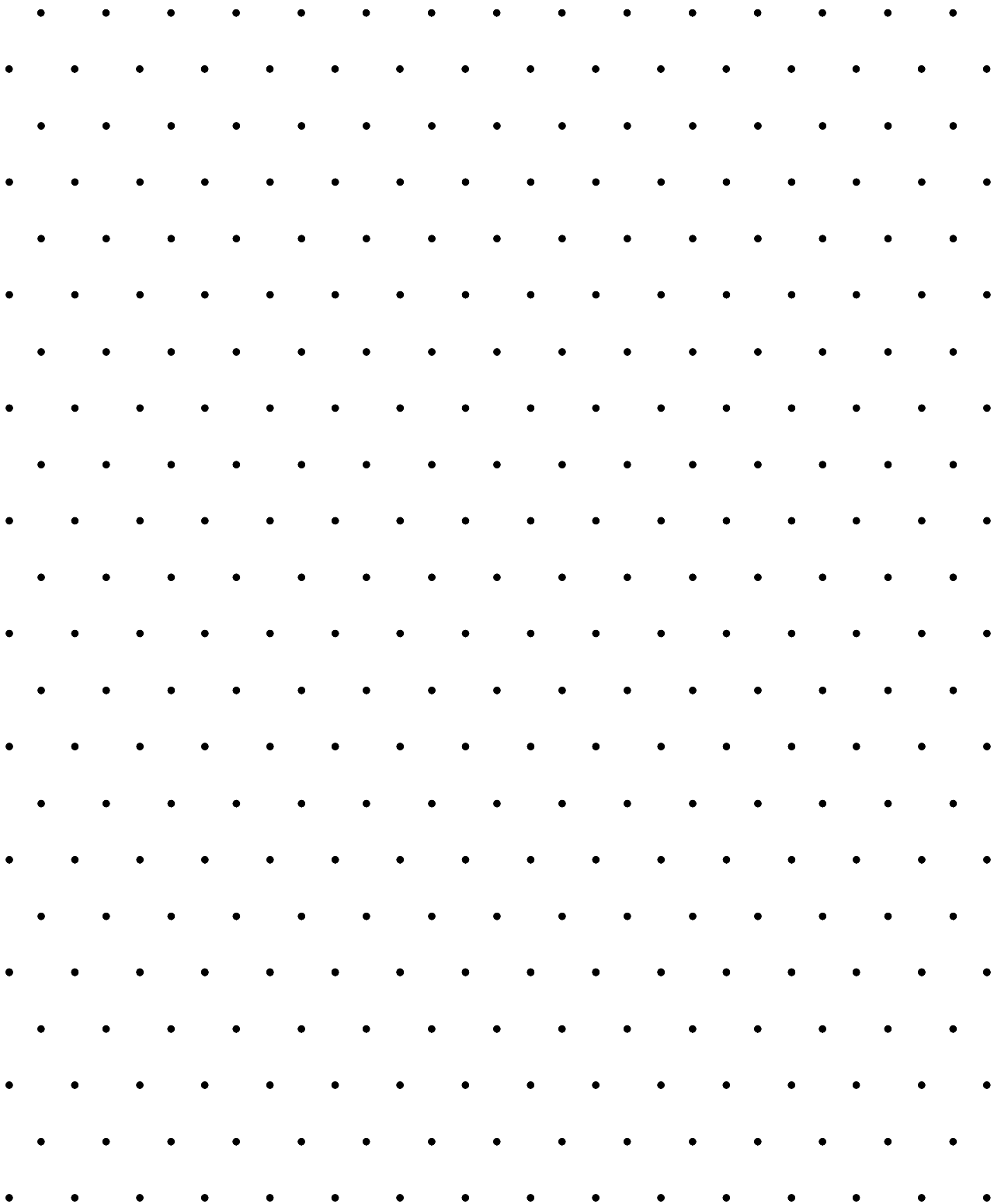
MIRROR PATTERNS 3

NAME(S):CLASS:



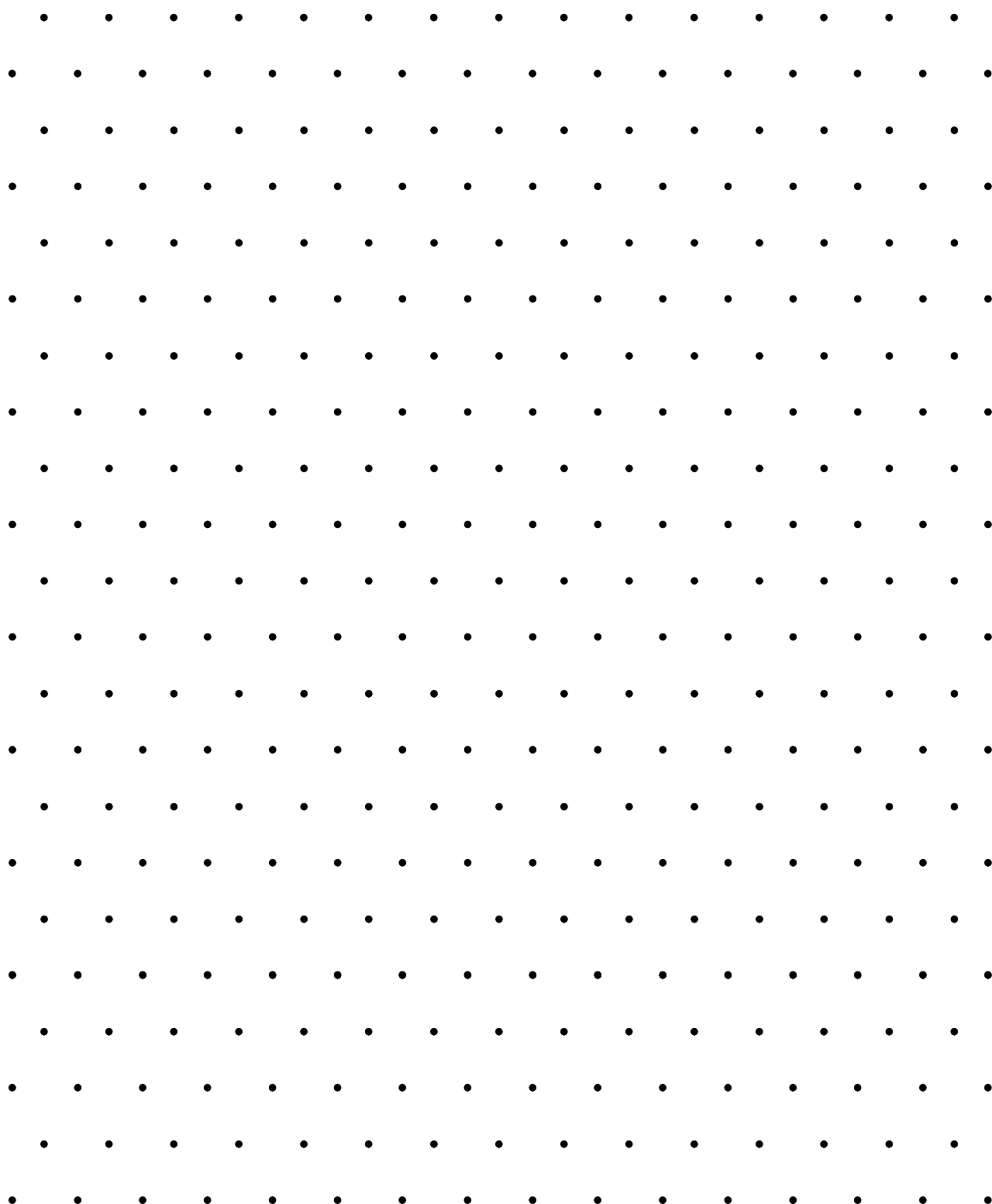
MATCH TRIANGLES

NAME(S):CLASS:



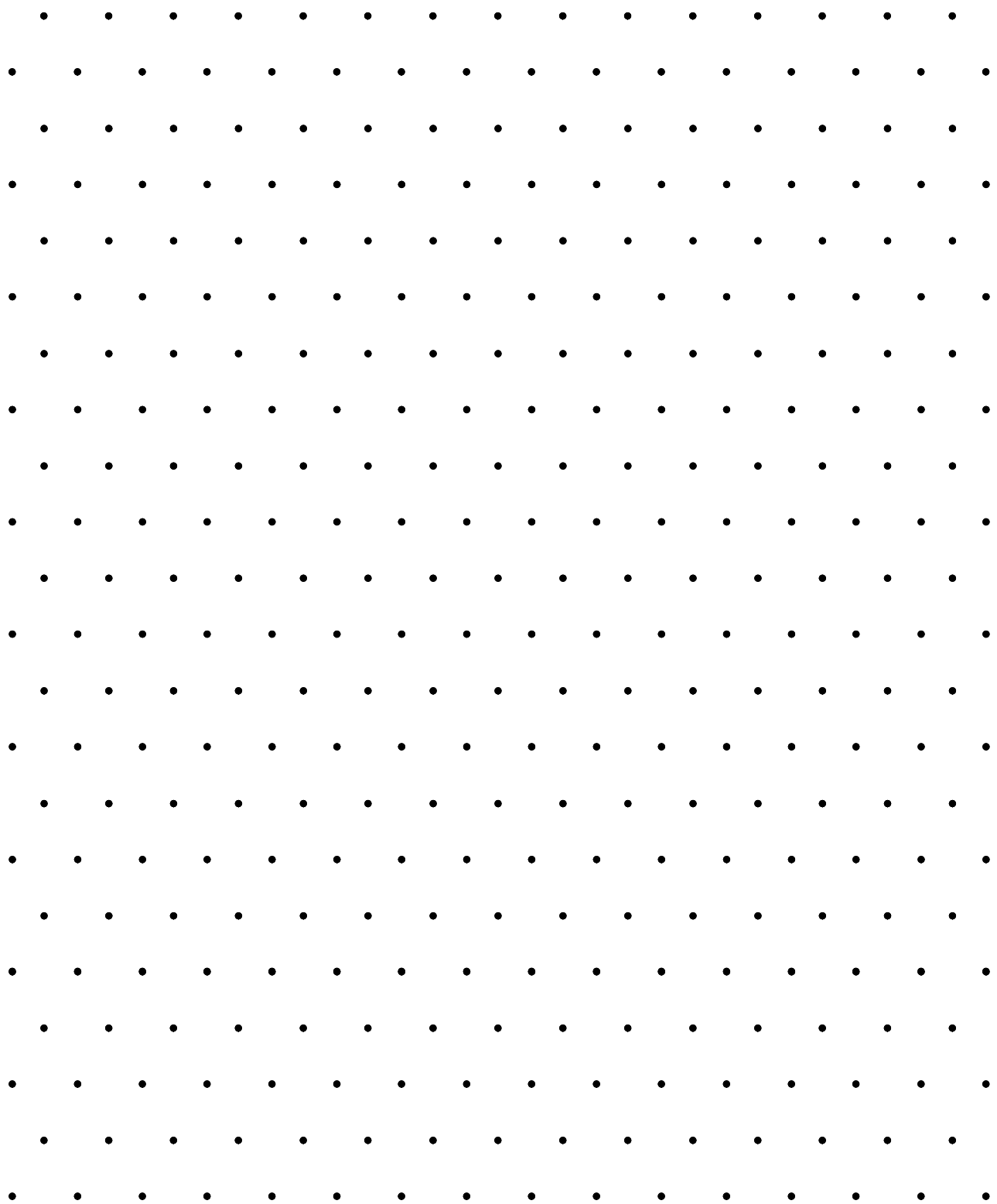
UNSEEN TRIANGLES

NAME(S):CLASS:



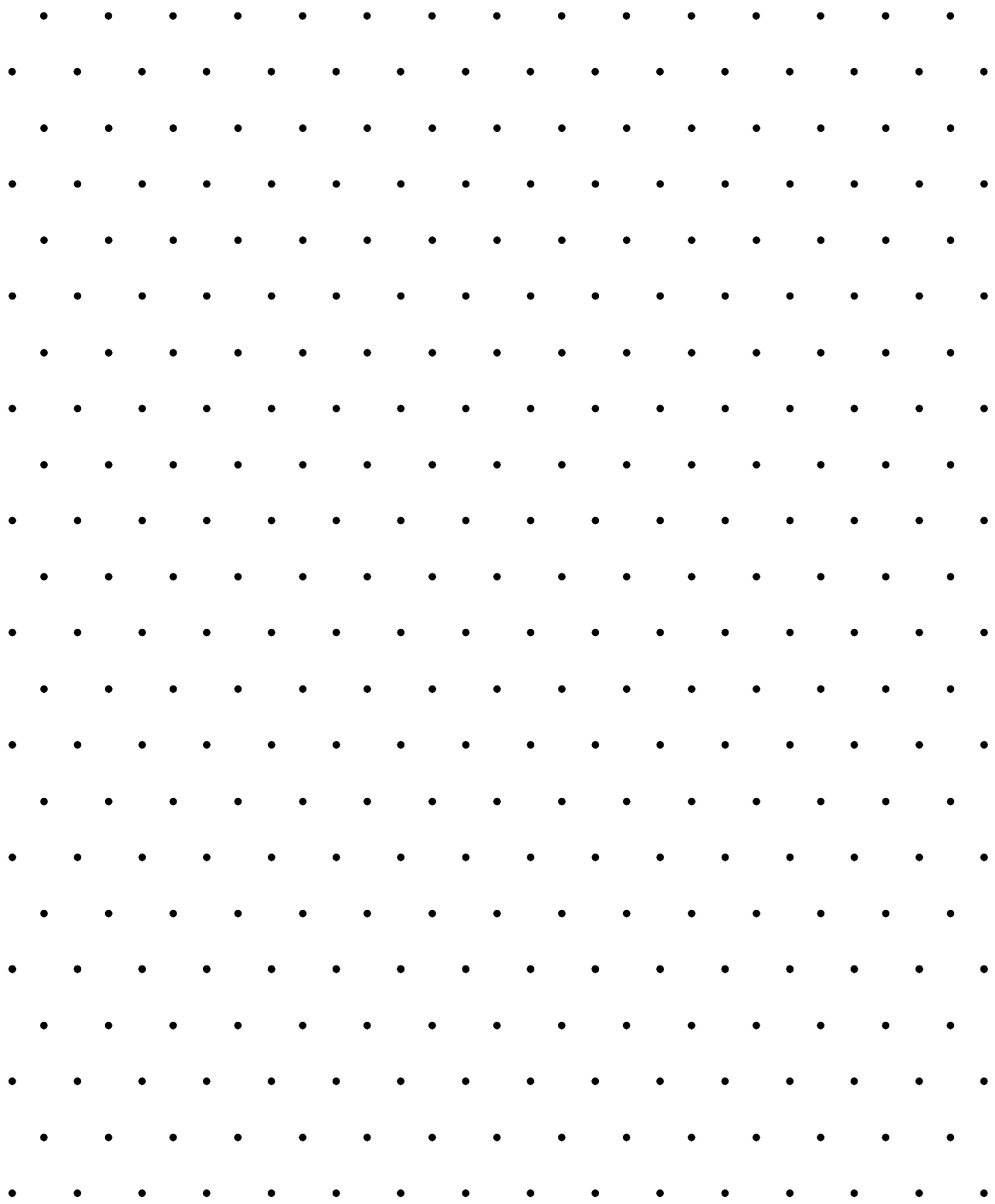
MAKING MONUMENTS

NAME(S):CLASS:



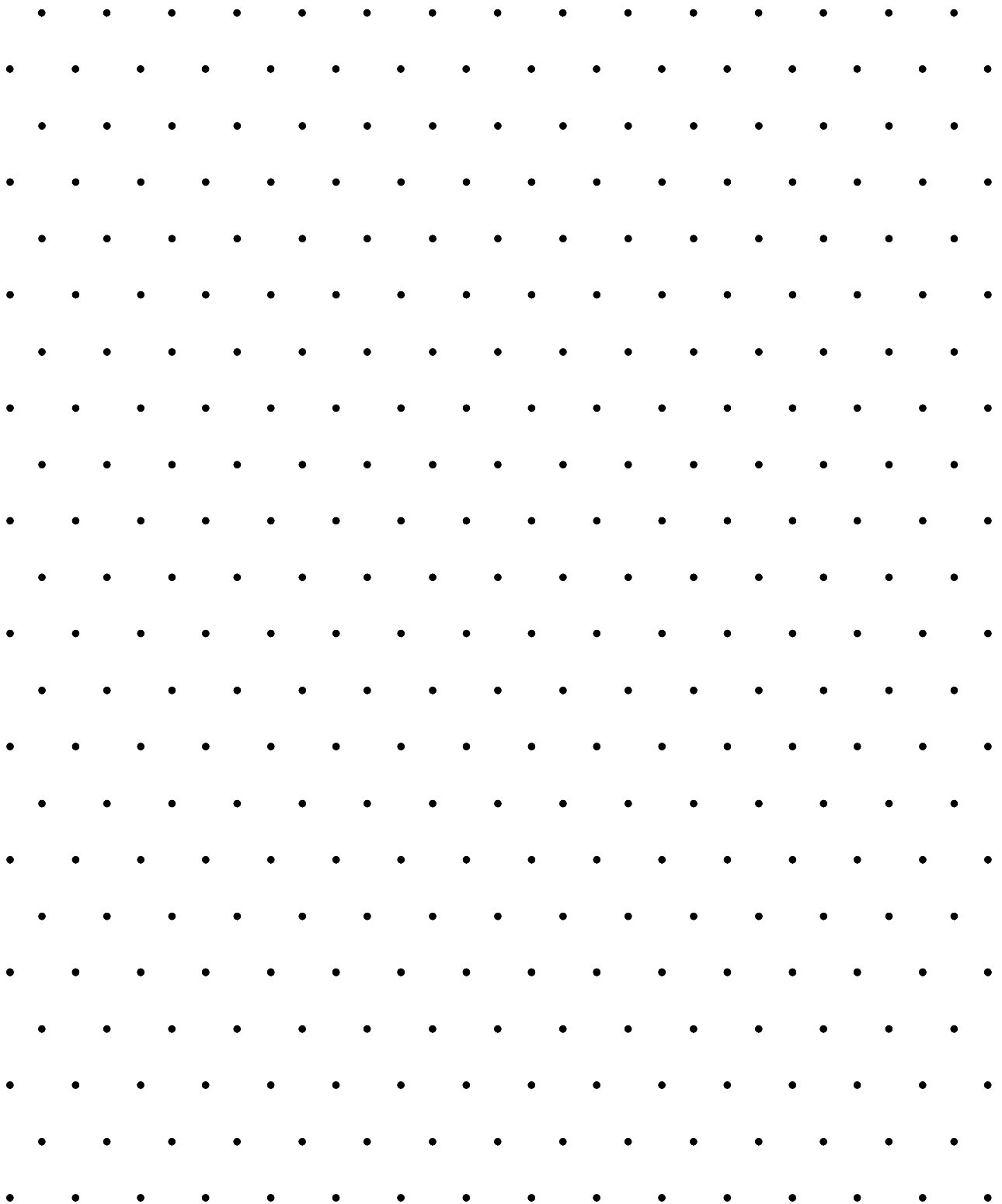
POINTY FENCES

NAME(S):CLASS:



TETRAHEDRON TRIANGLES

NAME(S):CLASS:

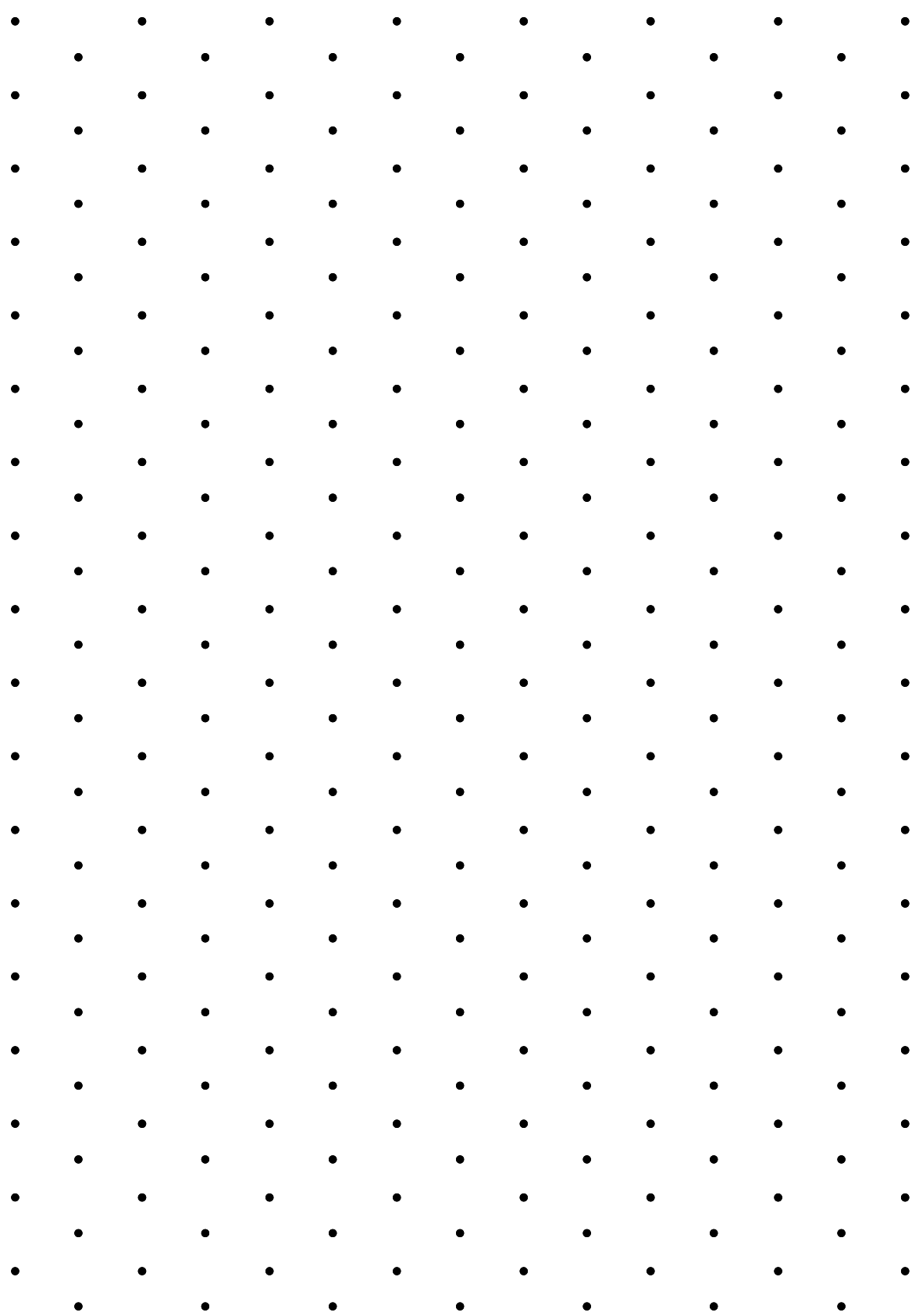


CROSS & SQUARE

NAME(S):CLASS:

GROWING TRICUBES

NAME(S):CLASS:



TRISQUARES

NAME(S):CLASS:

