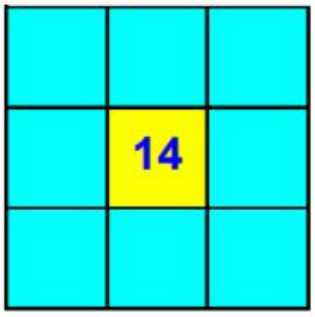
1 + 4 = 5
2 + 5 = 12
3 + 6 = 21
8 + 11 = ?

Year 6 to Year 7 Summer Maths PACK

CARDINAL NEWMAN CATHOLIC SCHOOL

Activity 1



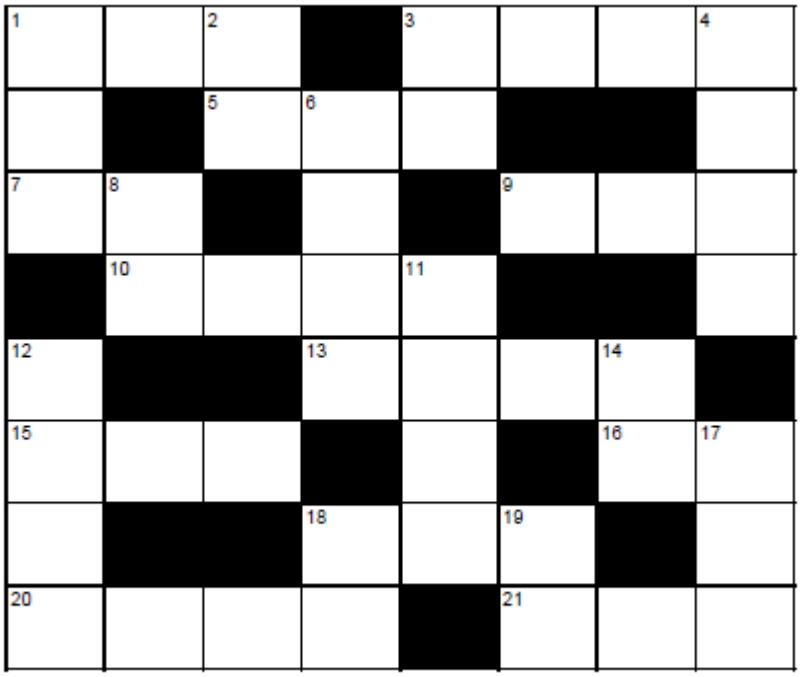
Can you put the numbers 1 to 8 in each of the squares so that each side adds up to the middle number?

Activity 2

M	E	A	N	E	L	K	A	A	E	Y
U	A	X	S	O	V	N	A	S	N	B
B	N	N	P	M	I	L	E	I	E	A
A	N	A	C	R	Q	T	O	I	B	L
S	U	L	T	I	E	A	A	S	I	A
E	T	U	T	I	T	S	B	U	S	N
Q	C	M	E	U	N	Y	S	L	Q	C
U	A	R	B	E	G	L	A	I	E	E
A	T	O	F	U	N	C	T	I	O	N
L	R	F	L	T	Q	A	U	O	S	N
S	A	E	M	E	S	S	N	F	L	U

ALGEBRA
BALANCE
EQUALS
EQUATION
EXPRESSION
FORMULA
FUNCTION
SOLVE
SUBSTITUTE

Activity 3



Enter the answers to the sums below into the matching squares on the numbered grid

Clues Across		Clues Down	
1:	983 - 509	1:	1342 - 896
3:	1134 + 1209	2:	344 divided by 8
5:	1428 divided by 4	3:	Three-quarters of 36
7:	20% of 335	4:	1765 + 1532
9:	53 x 3	6:	1847 x 3
10:	1721 x 2	8:	2nd prime number after 70
13:	4935 - 3112	11:	5678 divided by 2
15:	One third of 759	12:	Seven-eighths of 2552
16:	522 divided by 9	14:	7 x 5
18:	25% of 1180	17:	80% of 1040
20:	1133 + 2542	18:	5 squared
21:	66 x 12	19:	Half of 114

Name:

Activity 4

×	9	10	9	1	3	3	3	2	5	8
8										
7										
8										
1										
2										
7										
3										
7										
7										
10										

Activity 5

×	8	2	7	9
			35	
3		6		
4				36
6				

×	6	2		9
		8		
		16	24	72
		14	21	63

×		8		5
			36	
6	42	48		30
2			8	
	21			

×	7		8	3
	63		72	27
		30		18
2			16	

Activity 6

1. The ratio of k to m is 1 : 2. The ratio of m to n is 3 : 1. Find the ratio k : m : n in its simplest form.	**2.** A fair coin is flipped. What is the probability of getting heads?	**3.** An amount was shared in the ratio 1:2. The smallest share was 6. What was the total amount shared?
4. LCM of 4 and 10	**5.** $2\frac{1}{2}$ as an improper fraction	**6.** $(4 \times 10^5) - (6 \times 10^1)$
7. Simplify $\frac{5}{45}$	**8.** Solve: $5n + 7 = 37$	**9.** Double 5.2

Activity 7

Consecutive Numbers game.

Consecutive numbers are numbers that follow one another in order. For this challenge you must find consecutive numbers that satisfy the requirements for each box. An example is done for you

5 Multiple of 5	▶ 6 4 factors	▶ 7 Prime	▶ 8 Cube
11 Sum of digits is 2	▶ 12 Product of digits is 2	▶ 13 Prime	▶ 14 Even
2 Prime	▶ 3 Triangular	▶ 4 Square	▶ 5 Prime

Your turn

Product of digits is 8	▶ Product of digits is 9	▶ Even	▶ Sum of digits is 3
4 factors	▶ Prime	▶ 4 factors	▶ Square
3 factors	▶ Sum of digits is 1	▶ Sum of digits is 2	▶ Multiple of 3

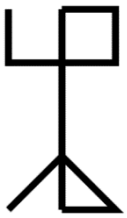
Activity 8

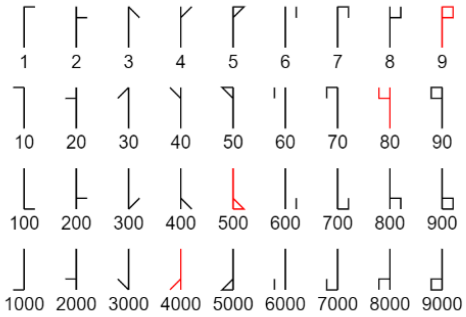
Cistercian Numerals:

Can you find the number

Example has been for you

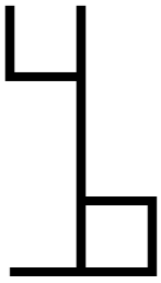
4589





Your turn

Find the number:



Can you guess how the number 4547 would look?

Activity 9

Countdown

292

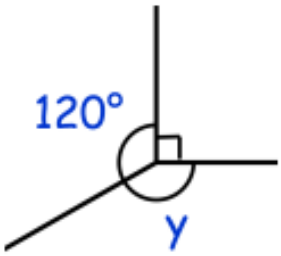
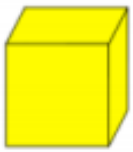
2	6	6	10	25	50

Find the closest calculation that will get you 292

Activity 10

Description	Rule
Angles in a triangle...	
Angles in a quadrilateral...	
Angles on a straight line...	
Angles around a point...	
Vertically opposite angles...	
Alternate angles...	
Corresponding angles...	
Co-interior angles...	

Activity 11

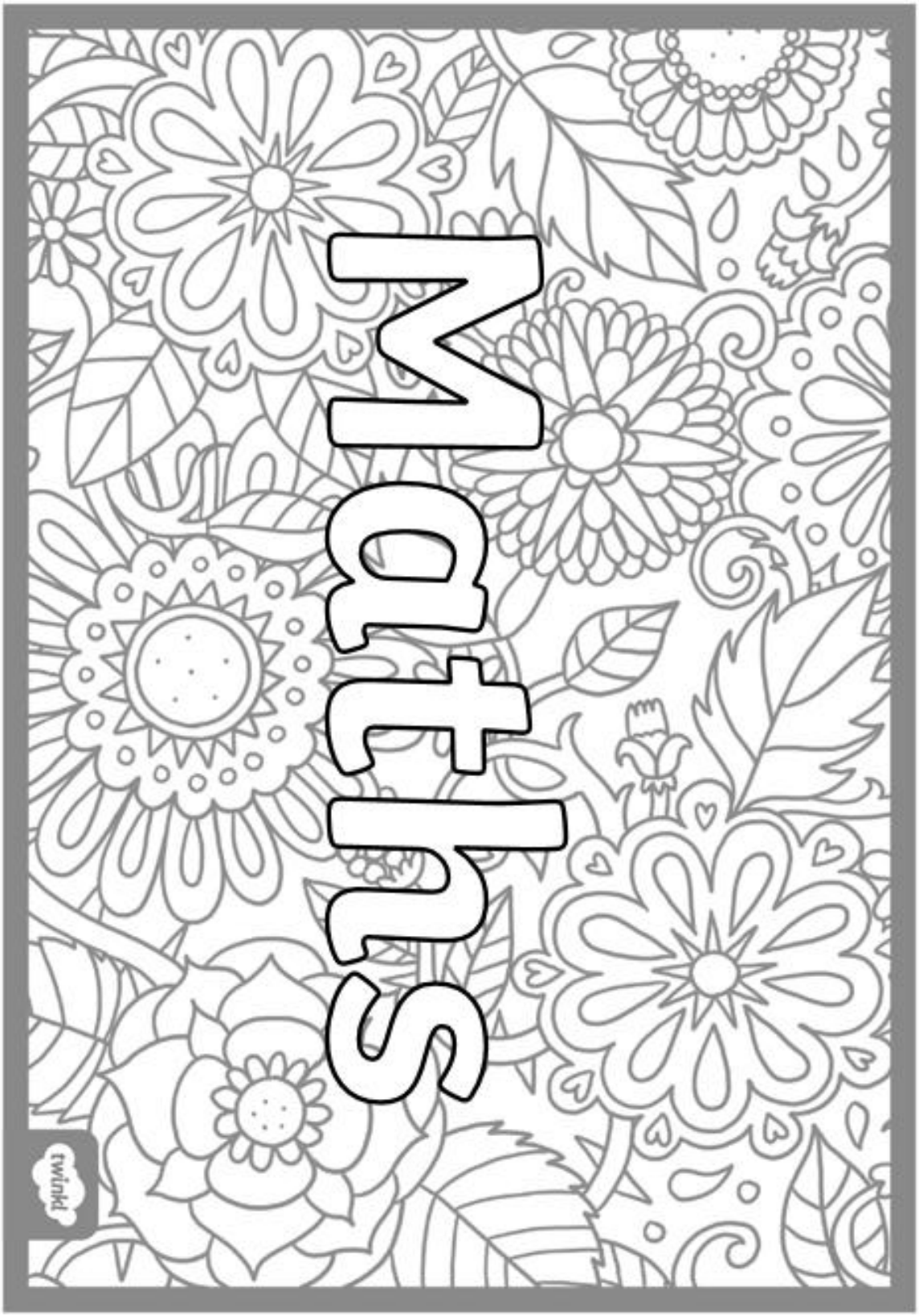
Write the number 1804 in words.	
A carton of milk costs 57p 	Find the cost of three cartons of milk.
	Find y
Sketch the net of a cube 	
Calculate 50% of £3	Calculate 10% of £7

Activity 12

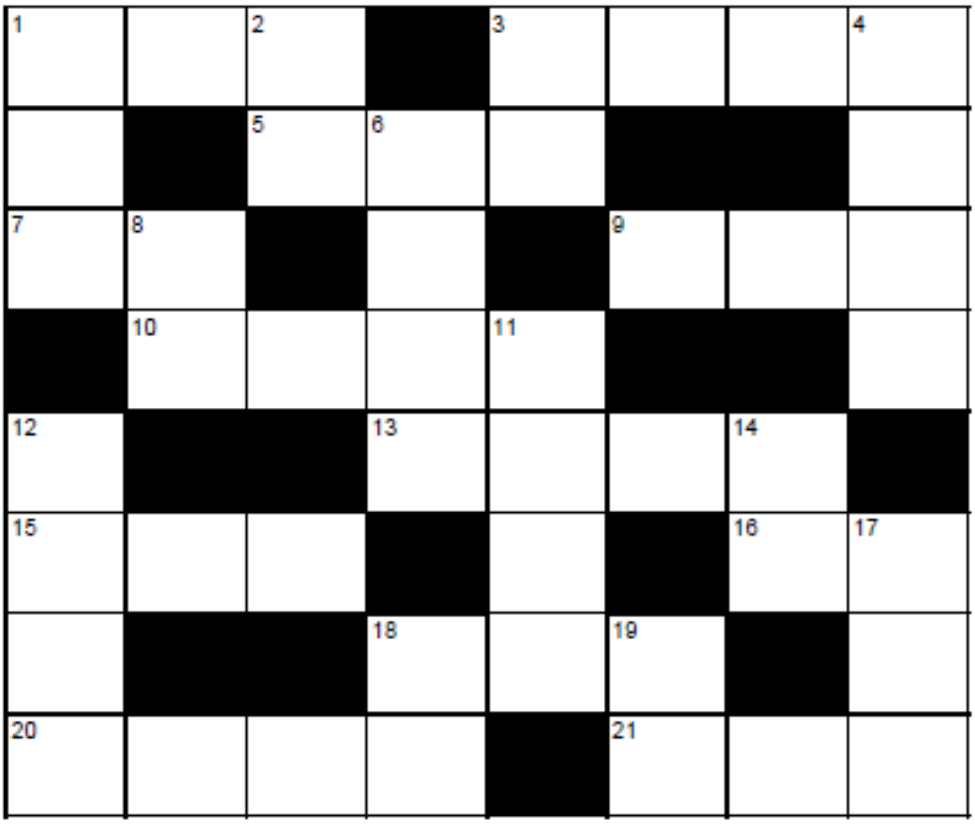
S N E D C E F L N X C L Q E C N N O
R Y D G U O O S E T A N I D R O O C
E P T E B G R G C E L N R X S I I E
D B A F O C M R N E C F G E H L T I
N I D O I E U I E E U H S L N L A G
I S G F D F L B R L L S A P E I U O
L E Q U I L A T E R A L E L O B Q E
Y C N E U Q E R F P T T I O F I E N
C T S A N M Q D M S O T I G S I M D
A O E N I O E O U C R T O O S R I L
F R I T L C C S C E O P M O N A E G
R A N O I S S E R P X E S G M I R V
A E C M C K M E I I T C G E E A L L
C C A T H S E I C R E R T A D A T L
T L T V O E S P I L L E C I R C L E
I N C H R R E C E Y R T E M O E G E
O A E S D D A S D H U N D R E D V C
N O G A X E H F O O T I U E L O I A

ANGLE
AVERAGE
BILLION
BISECTOR
CALCULATOR
CENTIMETRE
CHORD
CIRCLE
CIRCUMFERENCE
COMPASSES
CONE
COORDINATES
CORRELATION
CUBE
CUBOID
CYLINDER
DECIMAL
DIAMETER
ELLIPSE
EQUATION
EQUILATERAL
EXPRESSION
FACTOR
FIFTY
FOOT
FORMULA
FRACTION
FREQUENCY
GEOMETRY
GOOGOL
GOOGOLPLEX
GRADIENT
HALF
HEXAGON
HUNDRED
INCH
INTERCEPT
ISOMETRIC
ISOSCELES
KITE
LINE
LITRE

Activity 13 – colouring in poster



Activity 14



Enter the answers to the sums below into the matching squares on the numbered grid

Clues Across		Clues Down	
1:	50% of 982	1:	Half of 878
3:	2518 + 2135	2:	Square root of 144
5:	79 x 3	3:	376 divided by 8
7:	Three-quarters of 128	4:	7543 - 3915
9:	513 + 429	6:	737 x 5
10:	153 x 11	8:	First prime number after 60
13:	2668 + 3174	11:	7677 - 3789
15:	2022 divided by 3	12:	7346 divided by 2
16:	179 - 114	14:	156 divided by 6
18:	75% of 912	17:	Four-fifths of 730
20:	1739 + 2245	18:	8 squared
21:	Two-thirds of 846	19:	90% of 50

Activity 15

Long Multiplication Practice – 3 Digits × 2 Digits

1.				
		1	6	1
×			2	3

2.				
		2	3	2
×			2	6

3.				
		6	1	4
×			1	8

4.				
		9	6	9
×			9	5

5.				
		7	4	0
×			9	6

6.				
		3	6	2
×			5	8

7.				
		3	0	5
×			7	1

8.				
		3	7	0
×			6	4

9.				
		5	8	4
×			1	5

10.				
		8	5	1
×			8	9

11.				
		7	4	9
×			9	8

12.				
		4	8	2
×			2	3

13.				
		6	4	6
×			1	0

14.				
		7	0	9
×			1	7

15.				
		9	1	4
×			5	7

16.				
		7	1	8
×			4	5

Activity 16

Short Division Practice 4 Digits Divided By 1 Digit

Divide the numbers up to four digits by a one-digit number using the formal written method of short division. Some of the answers will have a remainder.

1. $2\overline{)2952}$

2. $4\overline{)6808}$

3. $4\overline{)9672}$

4. $6\overline{)9792}$

5. $8\overline{)5096}$

6. $9\overline{)1332}$

7. $8\overline{)9688}$

8. $5\overline{)3462}$

9. $4\overline{)7643}$

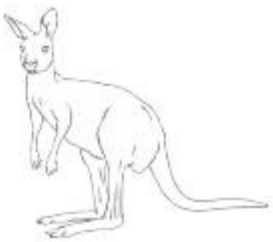
10. $7\overline{)6921}$

11. $9\overline{)4532}$

12. $3\overline{)8653}$

13. $7\overline{)3436}$

14. $9\overline{)6437}$



Activity 17 – Complete on next p.g.

River Riding

NOTE: In each section, do NOT connect the last point back to first point.

(X, Y)
☐ (0, 1)
☐ (2, 3)
☐ (4, 3)
☐ (3, 2)
☐ (4, 1)
STOP
☐ (24, 17)
☐ (24, 18)
☐ (23, 19)
☐ (22, 19)
☐ (21, 18)
☐ (21, 17)
☐ (22, 16)
☐ (23, 16)
☐ (24, 17)
STOP
☐ (14, 11)
☐ (14, 18)
☐ (21, 6)
☐ (17, 6)
STOP
☐ (12, 1)
☐ (14, 3)
☐ (16, 3)
☐ (15, 2)
☐ (16, 1)
STOP

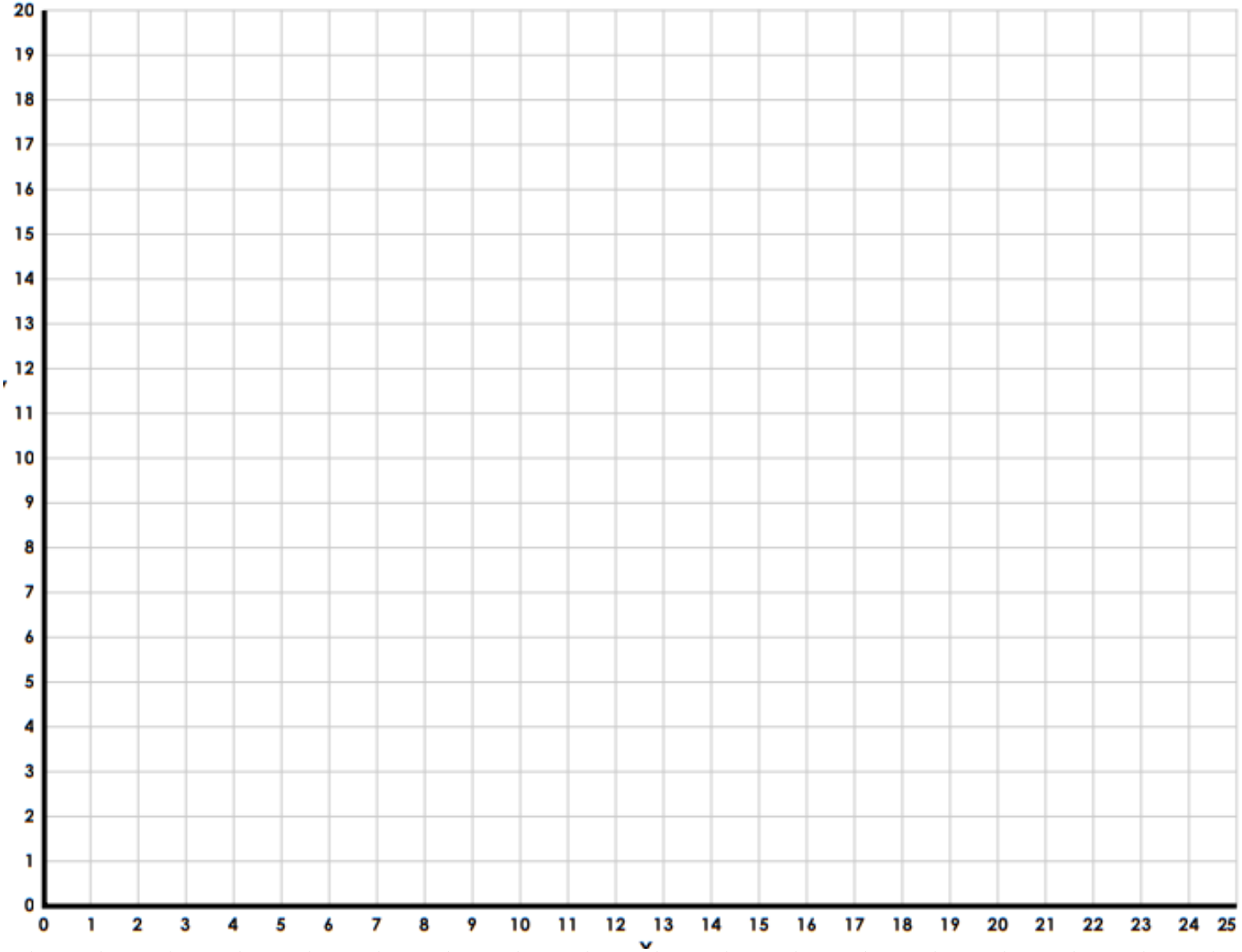
(X, Y)
☐ (4, 17)
☐ (5, 16)
☐ (6, 17)
STOP
☐ (8, 5)
☐ (9, 19)
STOP
☐ (20, 1)
☐ (22, 3)
☐ (24, 3)
☐ (23, 2)
☐ (24, 1)
☐ (25, 2)
STOP
☐ (7, 3)
☐ (3, 5)
☐ (23, 5)
☐ (22, 3)
STOP

(X, Y)
☐ (3, 18)
☐ (2, 17)
☐ (1, 18)
STOP
☐ (14, 5)
☐ (14, 6)
STOP
☐ (12, 1)
☐ (11, 2)
☐ (12, 3)
☐ (10, 3)
☐ (8, 1)
☐ (7, 2)
☐ (8, 3)
☐ (6, 3)
☐ (4, 1)
STOP

(X, Y)
☐ (9, 5)
☐ (9, 19)
☐ (17, 6)
☐ (9, 6)
STOP
☐ (2, 16)
☐ (3, 15)
☐ (4, 16)
STOP
☐ (20, 1)
☐ (19, 2)
☐ (20, 3)
☐ (18, 3)
☐ (16, 1)
STOP

Now color your picture

River Riding



Here are some maths jokes to keep you entertained over the Summer

What's a math teacher's favourite kind of tree?

Geometry.

Parallel lines have so much in common

… It's a shame they'll never meet.

I had an argument with a 90° angle.

It turns out it was right.

Did you hear about the over-educated circle?

It has 360°!

What shape is usually waiting for you inside a Starbucks?

A line.

Why doesn't anybody talk to circles?

Because there's no point.

Why was the obtuse triangle always upset?

Because it's never right.

What do geometry teachers have decorating their floor?

Area rugs!