Name: _____

Mental Math
= Do it in your head!

Oh!

	+1	-1	+10	-10	+5	-5
52						
78						
24						
39						
63						
246						
681						
450						
537						
325						

Name: _____

Adam hated green peas. There were 25 peas on his plate. His mother said he had to eat them. "Yuck!" Adam said. He put 3 peas in his mouth. How many peas were left on his plate?	Hunter hit the ball 11 times. David hit the ball 14 times. How many times did they hit the ball in all?	Rosa is losing her baby teeth. Last year she had 15 baby teeth. Four of her baby teeth fell out. How many baby teeth does she have left?

	plural	add s	add es	drop e add s	drop y add ies	oddball
1. ape	apes	☒	☐	☐	☐	☐
2. gun		☐	☐	☐	☐	☐
3. reward		☐	☐	☐	☐	☐
4. ladder		☐	☐	☐	☐	☐
5. inch		☐	☐	☐	☐	☐
6. tax		☐	☐	☐	☐	☐
7. pony		☐	☐	☐	☐	☐
8. strawberry		☐	☐	☐	☐	☐
9. self		☐	☐	☐	☐	☐

Name: _____

Mike picked up 24 pieces of trash. Jimmy picked up 23 pieces of trash. Bobby picked up 11 pieces of trash, and then he picked up 4 more pieces of trash. Which boy picked up the most pieces of trash?

Mrs. Thompson used an equal number of apples in each of 4 pies. She used 20 apples in all. How many apples did she use in each pie?

Ava is playing a game against Wendy. In the game you collect gold coins. You can also get hearts. Every heart is exchanged for 2 gold coins at the end of the game. Ava got 300 gold coins and 29 hearts. Wendy got 40 gold coins and 80 hearts. The game ended and they exchanged hearts for gold coins. Who won?

A year on Mars lasts 687 days. Robot Pete lives on Mars. He is exactly 3 Mars years old. That means he was born 2,061 days ago, assuming a robot was born, which makes no sense. But who cares!

Robot Pete's older brother Jack was born 399 days before Pete. How many days old is Jack? Don't forget, to be older, Pete should be MORE days old than Jack! If your answer is less than 2,061 then think again.

word root **aqua** can mean **water**   **aquarium, aquatic**

Name: _____

	+	+	=
+	B	B	C	16
=	C	B	A	25
	?	6	22

	+		**+**		**=**	
+	B	B	C	16
=	C	B	A	25
	?	**6**	**22**

Equations and Hints:

Each letter is a whole number.

Fill in the equations using the chart:

C + A = 22   B + B = __   __ + __ + __ = 25

__ + __ + __ = 16

Additional hints:

B is the smallest.   A = C + 2

Each letter is less than 16.   A is the largest.

Show Work:

Solve:

? = __

Name: _____

Ms. Clark's class is studying reptiles. Some of the students have reptile pets. They brought their pets to class. Everyone enjoyed seeing the reptiles. Adam brought his skink. Emily brought her two pet king snakes. Max brought a Gila monster and a chameleon. Amy brought four turtles. Gavin brought two skinks. How many reptiles did the students bring in all?

Hunter had twelve model cars. He had made each one by himself. First, he put the cars together. Then he painted each car. It took him two hours to make each car. He took four cars to school. He put them on the edge of a shelf. All four cars fell off and broke in many pieces. Hunter blamed Erin for breaking his cars when she put her books on the shelf. His teacher said he had put the cars too close to the edge of the shelf, so he should blame himself. How many cars does Hunter have left?

In nine hours it will be midnight. What time is it now?

5 - 1 + 1 + 5

7 ones, 9 hundreds

Amanda made some cookies. She made a wild guess about the time to bake them. She left them in the oven for 45 minutes. They all burned. The recipe said they should bake for 13 minutes. How many minutes too long were they in the oven?

Ava counted 358 people at the beach. If 148 of them were playing in the water, how many people were not playing in the water?

Fay, Jay, Kay, May, and Ray are monkeys. They think their names are too much alike. They went to the monkey name store and bought new names. They paid 5 quarters, 4 dimes, and 12 pennies for the names. How much did their new names cost?

Name: _____

The mailman spent 4.6 hours delivering mail today. Write that number in expanded form.	Mr. and Mrs. Rodriguez's children each made eight cards. They sent the cards on Forget Me Not Day. Mr. and Mrs. Rodriguez have two children. How many cards did they make in all?	Connor bought a box of beads for his craft project. There are 4,281 beads in the box. Round off 4,281 to the nearest hundred.
Circle the number that is smallest. 60,600 60,006 60,060 66,000	It is 8:44 when Amy leaves her house. She arrives at school at 9:03. How much time has passed?	Circle the number that is largest. 80,001 80,010 80,100 81,000
Jenna put her 21 best books on the 3 shelves by her bed. She put the same number of books on each shelf. How many books were on each shelf?	Mrs. White needs 11 bees to start a colony. She wants to make 3 colonies. How many bees does she need in all?	Jacob has saved 4 dimes and 6 nickels to buy a notebook. What fraction of a dollar has he saved?
15, 17, 19, 21, 23, 25, _____, 29	Make your own equation. ___ + 6 = ___	3 less than 843

word root **equi** can mean **same or equal**   **equation, equilateral**

Name: _____

Kevin likes Jell-O. He likes grape Jell-O best. He bought 4 boxes. Each box costs 55 cents. How much do 4 boxes cost?	Thornton Wilder's birthday is 15 days after Jacob's birthday. Jacob's birthday is April 27. On what date is Thornton Wilder's birthday?	Mary planted pumpkin seeds in her garden. She planted five pumpkin seeds. One pumpkin vine grew from each seed. There were two pumpkins on each vine. How many pumpkins in all were there in Mary's garden?

```
   8 7        6 5        1 3        9 7   |    7 4        4 7
 + 8 5      + 1 2      + 5 8      + 7 9   |  - 1 1      - 4 1
```

29 - 3   = _____

14 + ☐ = 21

Count by 6s.

42 ___ ___ ___ ___ ___

___ ___ 96 ___ ___

Write a word to describe January.

_____

```
   5 7
 - 3 4        7 ⟌ 4 9
```

Fill in the blanks with these numbers:
6, 7, 3

```
  ☐ ☐
-   1 ☐
─────────
  5   4
```
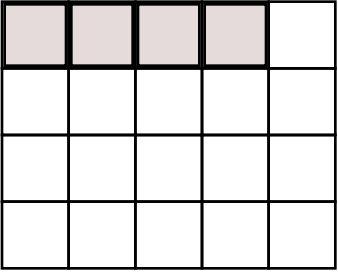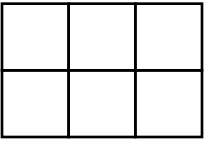
Fill in the blanks with these numbers:
1, 1, 1

```
  2   6
-   ☐ 5
─────────
  ☐ ☐
```

word root **di** can mean **day**   diary

Name: _____

```
  7 0
+ 3 4
```

Can you think of a five-letter word that has the vowel U in it?

_____

$25 +$ ☐ $= 27$

○ kof
○ calf
○ celf
○ colf

○ alays
○ always
○ olways
○ elways

```
5 ⟌ 10
```

Fill in the blanks with these numbers:
3, 6, 5

```
  ☐    8
+ 2   ☐
─────────
  9   ☐
```

Fill in the blanks with these numbers:
5, 1, 7

```
  ☐   ☐
+ 3   5
─────────
  ☐   2
```

What fraction of the box is shaded?

$\dfrac{\boxed{}}{5}$

```
6 ⟌ 48
```

Fill in the blanks with these numbers:
1, 4, 0

```
  4   2
  3   ☐
+ ☐   ☐
─────────
  8   6
```

Fill in the blanks with these numbers:
3, 0, 0

```
  ☐   ☐
  4   6
+ 2   ☐
─────────
  9   6
```

Color in $\dfrac{1}{3}$.

```
  4 6
+ 4 8
```

```
  6
x 6
```

```
  7 0
- 5 1
```

$44 - 3 \ = \ \underline{\hspace{2cm}}$

```
  1 0
+ 8 6
```

```
2 ⟌ 14
```

```
3 ⟌ 18
```

word root **contra** can mean **against or opposite**   **contradict**

Name: _____

Sudoku Sums of 7

Each row, column, and box must have the numbers 1 through 6.
Hint: Look for sudoku sums. The sum of the two boxes inside of
the dashed lines is 7.

Here is an example of a sudoku sum of 7:

4	3

Color in $\frac{1}{2}$.

2		3	6		1
					5
	1				
	6		5		
1		5	4		
		2			

5 + ☐ = 8

5 + ☐ = 11

4 + ☐ = 7

7 + ☐ = 15

9 + ☐ = 17

19 + ☐ = 31

30 + ☐ = 38

18 + ☐ = 34

What is the largest two-digit number you can make with the numbers 1, 3, and 6?

_____

$$\begin{array}{r} 9\,6 \\ -\ 6\,6 \end{array}$$

1 x 8   = _____

12 + ☐ = 27

$$\begin{array}{r} 8 \\ \times\ \ 4 \end{array}$$

4 ⟌ 36   8 ⟌ 56   6 ⟌ 18

Color in $\frac{3}{5}$ of the rectangle.

6 + 1 = ☐   10 - 7 = ☐   5 - 2 = ☐   9 + 5 = ☐

Name: _____

18 + 22	42 + 43	130 - 47	49 + 89	41 - 11	140 - 41
140 - 94	91 - 20	51 - 20	63 + 68	96 + 84	79 + 69
96 - 86	132 - 46	102 - 88	82 + 77	25 + 92	96 + 32
90 + 32	35 - 10	174 - 84	15 + 12	54 - 11	39 + 87
89 + 78	88 - 56	140 - 82	77 - 33	26 + 91	74 + 20
37 + 44	66 - 17	48 + 56	194 - 99	142 - 84	21 + 86
119 - 34	67 - 11	41 + 50	29 + 50	132 - 43	33 + 25

Side column:

```
      5
+     7
  [   ]

+     9
  [   ]

-     6
     15
+  [   ]
     24
+     4
  [   ]

-     2
  [   ]

+     4
  [   ]

-     2
  [   ]

+     4
     32
-  [   ]
     30
+     9
  [   ]
```

Name: _____

Can you guess the word?

No duplicate letters can be used.

J	E	A	N	S

The letter J is in the word and is in the correct spot.

F	A	R	C	E

The letter A is in the word, but A is not in that spot.

A B C D E F G H I J K L

A list of letters will be given that have not been used. Good luck!

Hint: There are no duplicate letters in the answer.

R	A	N	C	H

P	R	O	S	E

B D F G I J K L M Q T U V W X Y
Z

Let's check if you guessed correctly. Look across or down to find the correct answer.

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

Hint: There are no duplicate letters in the answer.

S	W	I	F	T

T	R	I	E	D

A B C G H J K L M N O P Q U V X
Y Z

Let's check if you guessed correctly. Look diagonally to find the correct answer. (DIAGONAL!)

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

Hint: There are no duplicate letters in the answer.

S	H	O	R	E

C	R	A	V	E

R	A	N	G	E

B D F I J K L M P Q T U W X Y Z

Let's check if you guessed correctly. Look diagonally to find the correct answer. (DIAGONAL!)

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

Name: _____

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

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

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

Name: _____

```
   2        7        6        8        6        2        3
 X 3      X 9      X 5      X 4      X 5      X 9      X 4
_____   _____   _____   _____   _____   _____   _____


  3 8      5 6      9 1      3 0      5 7
 X   6    X   5    X   2    X   3    X   7
_____   _____   _____   _____   _____


   6        9        8        4        2        8        3
 X 3      X 5      X 7      X 2      X 7      X 5      X 6
_____   _____   _____   _____   _____   _____   _____


   2        6        8        3        6        4        9
 X 5      X 7      X 4      X 9      X 8      X 2      X 3
_____   _____   _____   _____   _____   _____   _____


   5        8        4        6        2        4        8
 X 3      X 9      X 2      X 7      X 9      X 5      X 7
_____   _____   _____   _____   _____   _____   _____


  7 3      7 9      7 8      3 5      8 9
 X   6    X   3    X   8    X   2    X   3
_____   _____   _____   _____   _____
```

Name: _____

$\frac{1}{2}$		$\frac{1}{2}$	
$\frac{1}{3}$	$\frac{1}{3}$		$\frac{1}{3}$
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$ $\frac{1}{5}$
$\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$	$\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$		
$\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$ $\frac{1}{9}$			
$\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$ $\frac{1}{12}$			

Compare.

$\frac{2}{3}$ **(=)** $\frac{6}{9}$	$\frac{6}{9}$ **(>)** $\frac{1}{3}$	$\frac{1}{8}$ **(<)** $\frac{1}{2}$	$\frac{2}{12}$ ( ) $\frac{3}{5}$
$\frac{7}{8}$ ( ) $\frac{1}{9}$	$\frac{11}{12}$ ( ) $\frac{1}{4}$	$\frac{3}{12}$ ( ) $\frac{1}{4}$	$\frac{1}{4}$ ( ) $\frac{1}{3}$
$\frac{3}{5}$ ( ) $\frac{1}{2}$	$\frac{2}{4}$ ( ) $\frac{1}{2}$	$\frac{3}{8}$ ( ) $\frac{5}{12}$	$\frac{1}{5}$ ( ) $\frac{2}{4}$
$\frac{1}{3}$ ( ) $\frac{4}{8}$	$\frac{1}{4}$ ( ) $\frac{2}{8}$	$\frac{1}{2}$ ( ) $\frac{2}{3}$	$\frac{6}{9}$ ( ) $\frac{8}{12}$
$\frac{2}{9}$ ( ) $\frac{7}{12}$	$\frac{3}{5}$ ( ) $\frac{3}{9}$	$\frac{8}{12}$ ( ) $\frac{3}{9}$	$\frac{3}{4}$ ( ) $\frac{2}{5}$
$\frac{3}{5}$ ( ) $\frac{1}{8}$	$\frac{5}{8}$ ( ) $\frac{1}{2}$	$\frac{4}{8}$ ( ) $\frac{6}{12}$	$\frac{2}{12}$ ( ) $\frac{2}{3}$

Name: _____

Draw equal groups to represent the equation.

3 x 3 =

● ● ●   ● ● ●   ● ● ●   = _____

4 x 5 =

= _____

10 x 4 =

= _____

Make your own equation with equal groups.

Name: _____

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

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

99	72	20	34	56
X 7	X 5	X 9	X 2	X 5

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

Worked examples:

1
3
94
X 4 8
7 5 2
3 7 6
4 5 1 2

78
X 6 1

46
X 2 5

27
X 7 9

Name: _____

1 is written with an I.

    5 is written with a V.

        10 is written with an X.

           50 is written with an L.

              100 is written with a C.

You cannot have 4 of the same letter consecutively.

    4 is written as IV.

        9 is written as IX.

           40 is written as XL.

So you cannot write 44 like this: XXXXIIII.

    But you would write 44 like this: XLIV.

Write the number as a Roman numeral and then find the Roman numeral.

Roman Numerals

I = _____

IV = _____

VII = _____

IX = _____

XII = _____

XIV = _____

XV = _____

XIX = _____

XXIII = _____

2 _____ IIXLVIXXIII XXXXLIIXXIV	5 __V__ IVVXXXVIII LVXXIIIIVXI	1 _____ XLIIXIIIIXXL XIXXXVIIIXX	6 _____ VIIIXVIIIII XVXVIXLVII
11 _____ XIXXXVIXXX VXIXIIIXIII	12 _____ VIIIXVXIIIX XIIIXXVIIIV	15 __XV__ XVXIVXXXVI XVXXIVIIVI	8 _____ IVIIIXXIIIV XIVVIIIXVX
14 _____ IXXXXIVVVI XIVXXXXIXV	18 _____ IXVIIIXXVII IVXVIIIXIV	39 _____ XXXIXXXLIXL IIIXXXIXXIX	33 _____ IIIXXXIIIIV IIXXXIIIVV
41 _____ IIIIXIIXLIVI XLIXLVXIIII	42 _____ XLIIVIVIIII IIIIXLIIXLV	28 _____ XXXVIIIXLV VXXVIIIIIIX	57 _____ LVIIVIIIVII LVIIXXVIIIX

Name: _____

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

```
      2   7
   X  1   6
```

```
      3   1
   X  9   7
```

```
      5   0
   X  2   9
```

```
      2   8
   X  5   3
```

```
      2   3
   X  5   9
```

```
      3   8
   X  8   4
```

```
      8   1
   X  4   4
```

```
      3   4
   X  7   2
```

```
      5   6
   X  1   5
```

```
      7   1
   X  6   2
```

```
      2   1
   X  4   3
```

```
      9   1
   X  4   7
```

```
      9   3
   X  2   5
```

```
      5   7
   X  7   4
```

```
      5   4
   X  2   4
```

Name: _____

Mental Math

— #1 —
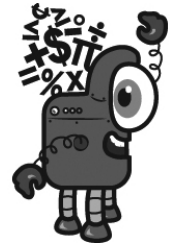
▶ Start with the number 197.

<u>197</u>

▶ Round to the nearest hundred.

4 9 7 3 8 3 2 0 0 5 (Circle your answer to double check you are correct.)

▶ Subtract 6.

6 1 3 1 9 4 9 4 7 1

_____

▶ Add 5 hundreds.

6 9 4 0 1 7 9 0 2 3

_____

▶ Divide that number in half.

2 5 3 1 5 3 4 7 8 2

_____

▶ Subtract 5.

2 3 4 2 3 1 1 4 6 2

_____

▶ Subtract 2 hundreds.

3 0 2 0 1 4 2 7 9 5

_____

▶ Subtract 4.

2 3 1 3 8 2 4 1 9 5

_____

▶ Add the number of inches in 1 foot.

7 4 2 2 5 9 1 5 0 2

_____

Name: _____

Make change. You can use $20, $10, $5, $1, 25¢, 10¢, 5¢, or 1¢.

Make $51.46 using bills and coins.

| | | $10 | |

◯   ◯   ◯   (1¢)

Show a different way to make $51.46 using a different number of bills or coins.

Make $55.57 using bills and coins.

Show a different way to make $55.57 using a different number of bills or coins.

```
  3 7
+ 8 4
```

Write the possessive for the phrase below.
two boxes belonging to one child

_____

Name: _____

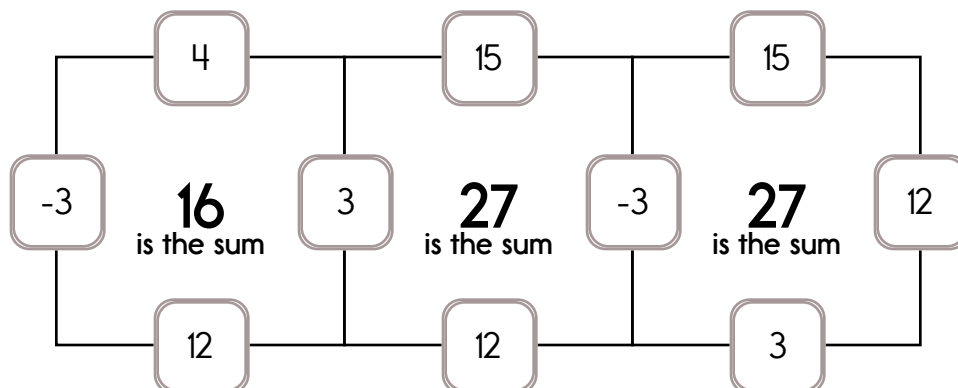This puzzle has a large number in the middle, which is the sum of the four numbers that surround it.

Example:

3 + 4 + 12 - 3 = 16

Example:

12 + 15 + 3 - 3 = 27

Sample:

	4		15		15	
-3	**16** is the sum	3	**27** is the sum	-3	**27** is the sum	12
	12		12		3	

Fill in the missing numbers. How? The sum of the four surrounding numbers is in the center of each square.

Exactly one of the four numbers has to be one of these numbers: -6, -3, or -9. The other three numbers have to all be DIFFERENT and must be from these: 8, 9, 12, 13, 3, 4, or 15.

	4		12		12	
-9	**19**	9	**16**	4	**19**	-6 even
	15		-9 odd		9	
□ odd	**22**	□ greater than 3	**16**	8	**14**	□ either 12 or 3
	□ even		13		□ even	
8	**26**	□ odd	**31**	□ greater than 3	□ (dashed) less than 13	□
	□ greater than 3		□ less than -6		15	

Name: _____
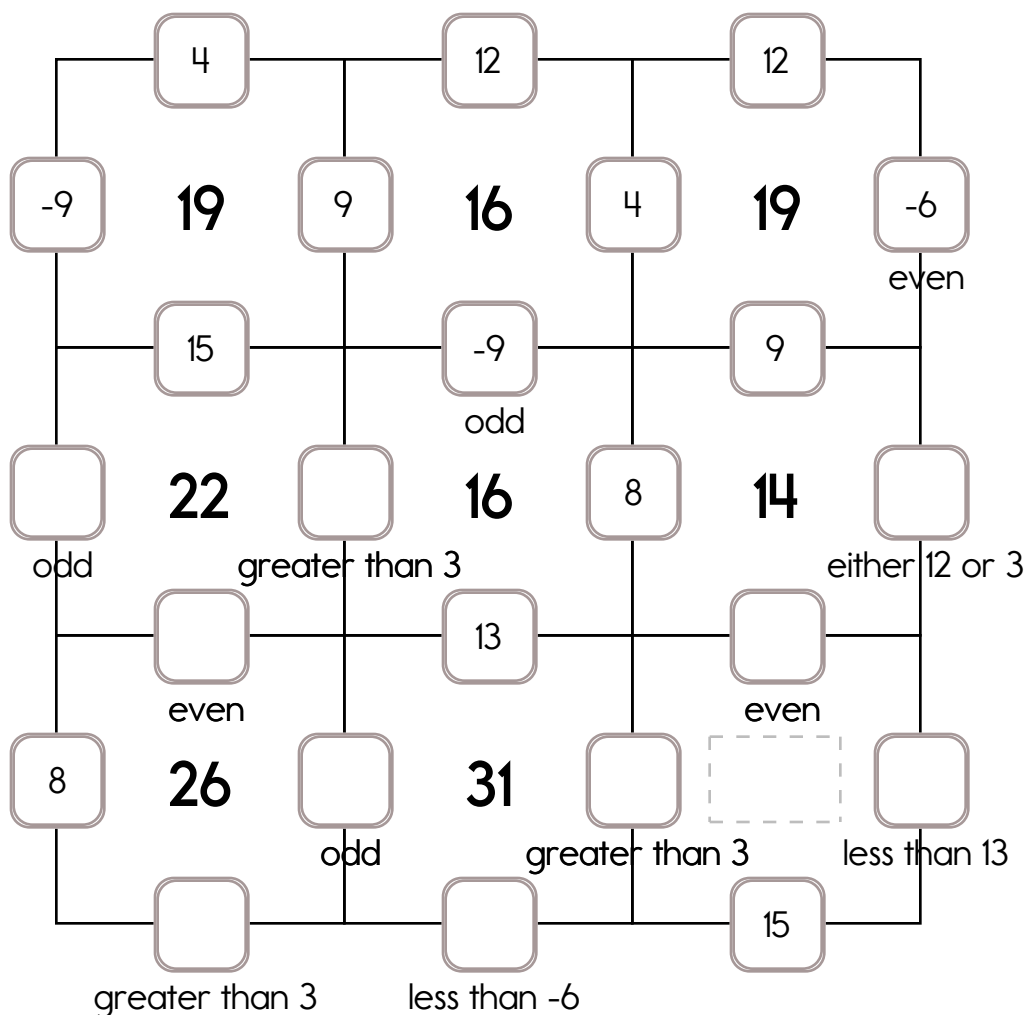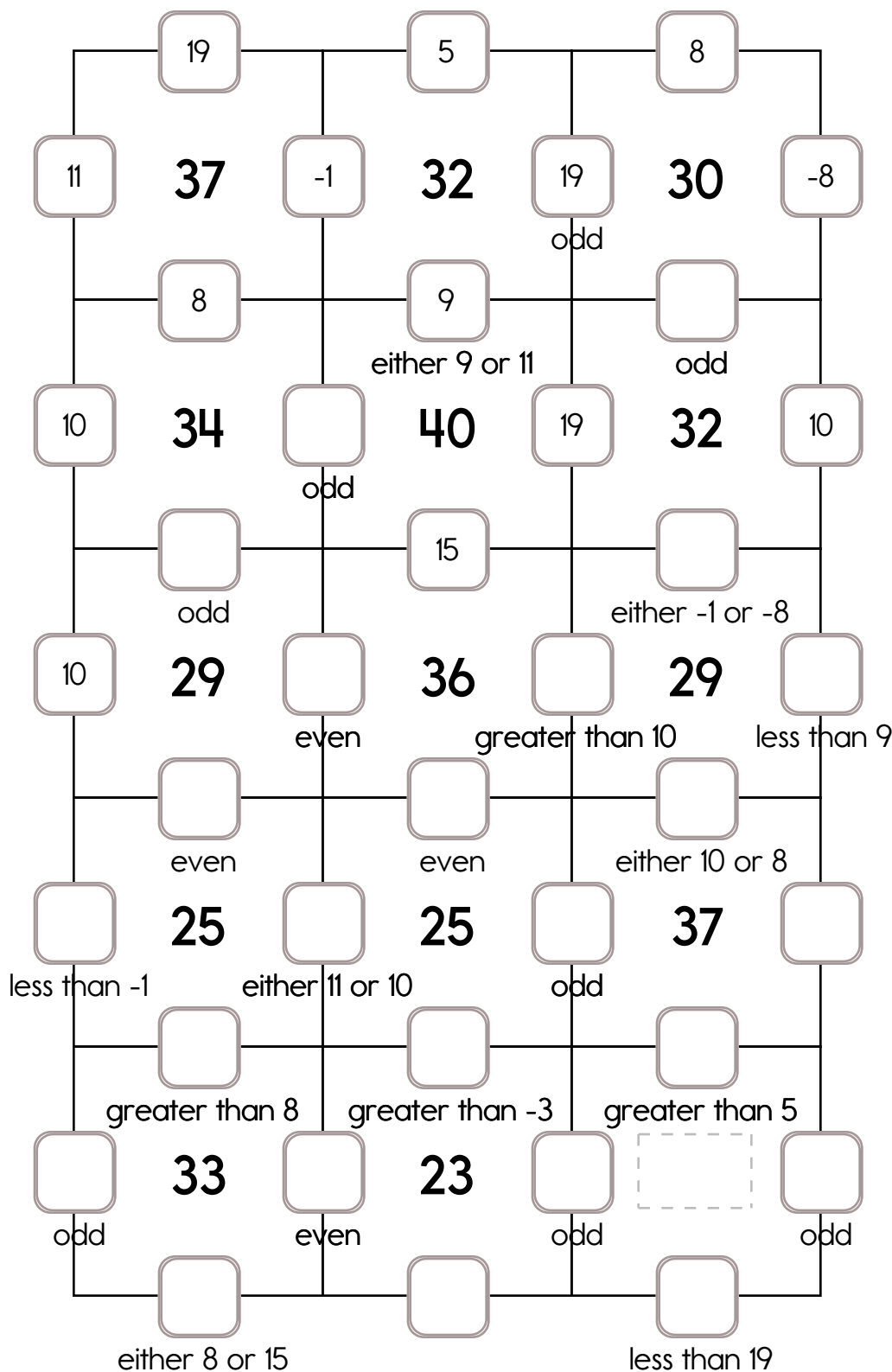
Fill in the missing numbers. How? The sum of the four surrounding numbers is in the center of each square.
Exactly one of the four numbers has to be one of these numbers: -3, -8, or -1.
The other three numbers have to all be DIFFERENT and must be from these: 19, 8, 15, 9, 5, 10, or 11.

19		5		8	

11	**37**	-1	**32**	19	**30**	-8
				odd		

	8		9		☐	
			either 9 or 11		odd	

| 10 | **34** | ☐ | **40** | 19 | **32** | 10 |
| | | odd | | | | |

| | ☐ | | 15 | | ☐ | |
| | odd | | | | either -1 or -8 | |

| 10 | **29** | ☐ | **36** | ☐ | **29** | ☐ |
| | | even | | greater than 10 | | less than 9 |

| | ☐ | | ☐ | | ☐ | |
| | even | | even | | either 10 or 8 | |

| ☐ | **25** | ☐ | **25** | ☐ | **37** | ☐ |
| less than -1 | | either 11 or 10 | | odd | | |

| | ☐ | | ☐ | | ☐ | |
| | greater than 8 | | greater than -3 | | greater than 5 | |

| ☐ | **33** | ☐ | **23** | ☐ | ☐ | ☐ |
| odd | | even | | odd | | odd |

| | ☐ | | ☐ | | ☐ | |
| | either 8 or 15 | | | | less than 19 | |