**Name:** _____

| 2 | -1 | | +2 | | | | -2 | | +1 |

The puzzle grid contains the following values in a looping path:

2 | -1 | | +2 | | | | -2 | | +1

+3 | +3 | -3

+1 | | -3 | | +2 | +3 | | +3

-3 | | -2 | -1 | +3

+1 | | +2 | | +1 | 7 | -2 | | +3 | 10

---

## Draw your own patterns.

3 9 3 9 3 9 3 9 3 9 3 9 3 9 3

AB pattern

Draw an ABA pattern.

I drew an _____ pattern.

word root **post** can mean **after**        postscript

**Name:** _____

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

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

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

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

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | 9 | 1 | □ | □ | 3 | □ | □ | 4 |
| + 1 | + 6 | + 9 | + 5 | + 5 | + 7 | + 8 | + 7 | + □ |
| 3 | □5 | □0 | 6 | 1 2 | □0 | 1 2 | 8 | 8 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | □ | □ | 6 | 9 | 9 | □ | 7 | 8 |
| + 6 | + 4 | + 9 | + □ | + 3 | + □ | + 5 | + 3 | + □ |
| 8 | 1 2 | 1 3 | 1 3 | □2 | 1 7 | 1 4 | □0 | 1 5 |

Math Puzzles

**Name:** _____

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

Example:                              Example:

40 + 60 + 4 + 30 = 134               30 + 80 + 60 + 4 = 174
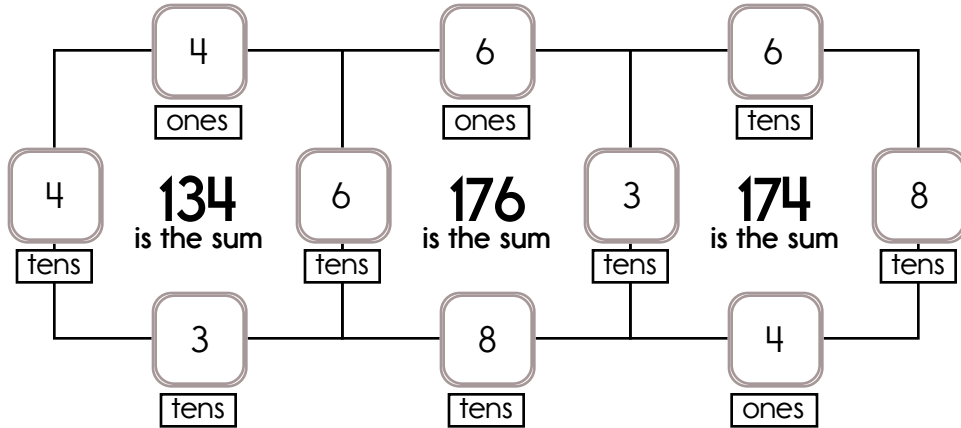
| | 4 | | 6 | | 6 | |
|---|---|---|---|---|---|---|
| | ones | | ones | | tens | |
| 4 | **134** | 6 | **176** | 3 | **174** | 8 |
| tens | is the sum | tens | is the sum | tens | is the sum | tens |
| | 3 | | 8 | | 4 | |
| | tens | | tens | | ones | |

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

| | 8 | | 6 | | 3 | |
|---|---|---|---|---|---|---|
| | tens | | tens | | tens | |
| 4 | **185** | 5 | ☐ | 8 | ☐ | 4 |
| tens | | ones | | tens | | tens |
| | 6 | | 4 | | 6 | |
| | tens | | tens | | ones | |
| 3 | ☐ | 5 | ☐ | 8 | ☐ | 4 |
| tens | | ones | | tens | | tens |
| | 8 | | 3 | | 6 | |
| | tens | | tens | | tens | |

---
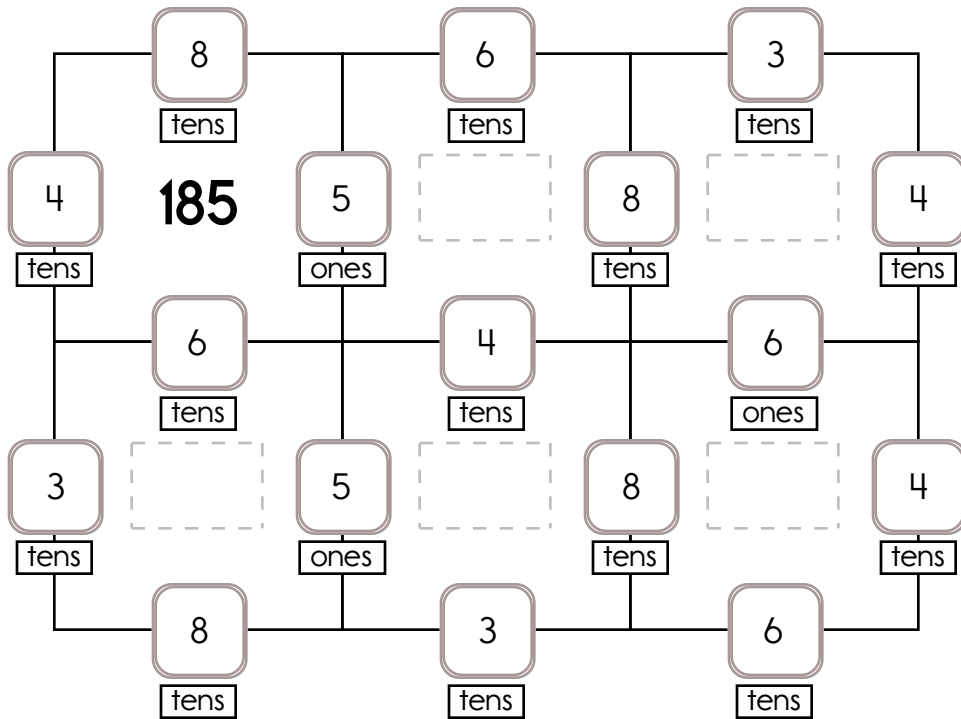
Circle the fifth number.

6, 8, Z, A, F, 5, 8, B, 1, X, 2, R, 1, D, 6, 8, D, A

---

1
+ 6
_____

---

A, E, I, _____, Q, U, Y

**Name:** _____
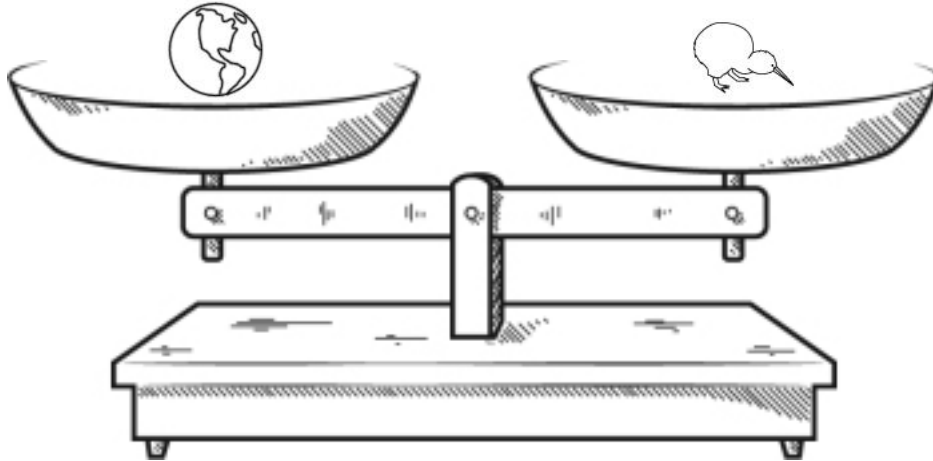
Look at the balance.  What does it tell you?  Write a sentence to explain.

_____

🥝 = 🌍

☐ True            ☐ False

🌍🌍 = 🥝🌍🌍

☐ True            ☐ False

🌍🌍🌍 = 🥝🌍🌍

☐ True            ☐ False

🌍🌍🌍 = 🥝🥝🌍
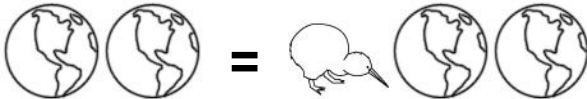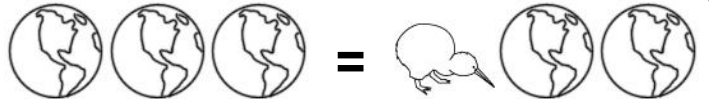
☐ True            ☐ False

🌍🌍 = 🥝🥝🥝

☐ True            ☐ False

Did you find that two are true?  If not, look again!
You should only mark TRUE if you are absolutely sure it is correct!

36, ____, 38, 39, ____,

____, ____

Which number should

replace the third blank?

$$\begin{array}{r} 5 \\ -\ 4 \\ \hline \end{array}$$

25 - ____ = 22

word root **se** can mean **apart or aside**          secession, seclude, seclusion

**Name:** _____

Subtract 1 or 10.

| | 35 |
|---|---|

| | 15 |
|---|---|

| |
|---|
| 53 |

| |
|---|
| 38 |

| | 33 |
|---|---|

| | 47 |
|---|---|

| |
|---|
| 21 |

| |
|---|
| 35 |

| | 22 |
|---|---|

| | 50 |
|---|---|

| |
|---|
| 48 |

| |
|---|
| 22 |

| |
|---|
| 43 |

| |
|---|
| 39 |

| | 14 |
|---|---|

| | 46 |
|---|---|

| | 23 |
|---|---|

| | 45 |
|---|---|

| |
|---|
| 25 |

**Name:** _____

Fill in the numbers.

**Puzzle 1**

| 11 |    | 13 |
|----|----|----|
|    | 22 |    |
| 31 |    |    |
|    |    |    |

**Puzzle 2**

|    | 43 |
|----|----|
|    |    |
|    |    |
|    |    |

**Puzzle 3**

|    |    |    |
|----|----|----|
|    |    | 49 |
|    | 58 |    |
|    | 68 | 69 |

**Puzzle 4**

| 71 | 72 |    | 74 |    |    |
|----|----|----|----|----|----|
|    |    |    |    |    |    |
|    |    |    | 95 |    |    |

**Puzzle 5**

| 23 |    |    | 26 |
|----|----|----|----|
|    | 34 |    |    |
|    |    | 45 |    |

**Puzzle 6**

|    |    |
|----|----|
| 32 |    |
|    |    |
|    |    |
|    |    |

**Puzzle 7**

| 12 |    |    |    |    |
|----|----|----|----|----|
|    | 23 |    |    |    |
|    |    | 34 |    |    |
| 42 |    |    |    |    |
|    |    |    |    |    |

**Name:** _____

Complete each pattern, using the same rule.  Write what the rule is.

X, T, P, L, H, ___

___, ___, ___, N, J, F, B

Complete each pattern, using the same rule.  Write what the rule is.

9, 11, _____, _____, 17, 19, 21

5, 7, _____, 11, _____, _____

_____, _____, 15, 17, _____, 21

**Name:** _____

Only use a pencil to write the numbers on the blank lines.  You do not need any scrap paper!  Solve it in your head.  If you forget a number, then start over.  Cool, huh?

**Mental Math** = Do it in your head!

| imagine 6 in your head | imagine 7 in your head | imagine 8 in your head | imagine 8 in your head |
|---|---|---|---|
| double it | add 8 | add 8 | add 1 |
|  | add 7 | subtract 2 | subtract 2 |
| Write the number. | Write the number. | Write the number. | Write the number. |
| ____ ____ <br> A    B | ____ ____ <br> C    D | ____ ____ <br> E    F | ____ <br> G |

## What is the sum?

### A + B + C + D + E + F + G

____ ____

## Wow!  Great job!  That's the answer, but do you know how to SPELL the number?

____ ____ ____ __e__ __t__ ____ ____ ____

| | | |
|---|---|---|
| 4 after 14 _____ | 6 before 11 _____ | 5 after 11 _____ |
| 3 after 16 _____ | 2 before 18 _____ | 9 after 13 _____ |
| 7 after 18 _____ | 9 before 17 _____ | 6 after 12 _____ |
| 8 after 17 _____ | 3 before 12 _____ | 2 after 19 _____ |

Math Puzzles

**Name:** _____

Fill in the missing numbers.

Only rule - The same number CAN NOT be next to each other, in ANY direction.

Dark lines surround a block.  Numbers to use in a block:
   A block with 1 space has to be the number 1.
   A block with 2 spaces must have the numbers 1 and 2.
   A block with 3 spaces must have the numbers 1, 2, and 3.
   A block with 4 spaces must have the numbers 1, 2, 3, and 4.

| 4 | 2 | 3 | 1 |
|---|---|---|---|
| 3 | 1 | 4 | 2 |
| 4 | 2 | 3 | 1 |
|   |   |   |   |

An entire block with 4 spaces is blank.  Since the block is 4 spaces it uses the numbers 1-4.

**4   2   3   1**

| 1 | 3 | 1 | 3 |
|---|---|---|---|
| 2 | 4 | 2 | 4 |
| 3 | 1 |   |   |
| 2 | 4 |   |   |

An entire block with 4 spaces is blank.  Since the block is 4 spaces it uses the numbers 1-4.

**3   1   4   2**

| 1 | 2 | 1 |   |
|---|---|---|---|
| 3 |   | 3 | 4 |
| 2 |   | 2 |   |

Hint - These numbers are missing:

**4   1   2   1**

|   | 2 | 1 |   |
|---|---|---|---|
| 4 | 3 | 4 | 2 |
| 1 |   | 1 | 3 |

Hint - These numbers are missing:

**3   2   1**

| 5 is more than | 10 - 1 = _____ | 4 is more than |
|---|---|---|
| ○ 6    ○ 5    ○ 4 | ○ 9    ○ 11    ○ 9 | ○ 5    ○ 3    ○ 4 |

**Name:** _____

Fill in the missing numbers.

|     |     |     | |     |     |
|-----|-----|-----|-|-----|-----|
| 3   |     |     | | 3   | 1   |
| 4   |     |     | |     | 2   |
| 3   |     |     | |     | 1   |
| 4   | 2   |     | | 4   |     |

Hint - These numbers are missing:

**2    1    1    2    4    3**

|     |     |     | |     |     |
|-----|-----|-----|-|-----|-----|
| 3   | 2   |     | |     | 2   |
| 4   |     |     | | 3   |     |
|     |     |     | | 4   | 2   |
| 4   | 1   |     | |     | 1   |

Hint - These numbers are missing:

**1    3    2    4    3    1**

|     |     |     | |     |     |
|-----|-----|-----|-|-----|-----|
| 3   |     |     | | 3   | 1   |
| 2   | 4   |     | |     |     |
|     |     |     | | 3   | 1   | 3 |
| 4   |     |     | | 4   |     |

Hint - These numbers are missing:

**2    1    2    4    1    2**

|     |     |     | |     |     |
|-----|-----|-----|-|-----|-----|
|     |     |     | |     | 2   |
| 4   | 3   |     | |     | 3   |
| 1   | 2   |     | |     | 2   |
|     |     |     | | 4   | 3   | 4 |

Hint - These numbers are missing:

**1    1    2    3    1    4**

Circle all the ways to make 7.

7 + 2    1 + 6    5 + 2
3 + 4    4 + 1    4 + 4
3 + 3    6 + 2    4 + 5

Circle all the ways to make 15.

9 + 6    6 + 8    2 + 13
13 + 4    12 + 3    5 + 10
14 + 1    11 + 4    6 + 10

Double two.


word root **ize** can mean **to act or to make**          **memorize, recognize, vocalize**

**Name:** _____

Puzzle:

| | | |
|---|---|---|
| 🌷 | ▱ | 12 |
| ▱ | 0 | 5 |
| 12 | 5 | ✚ |

Work Area:

| | | |
|---|---|---|
| | | 12 |
| | 0 | 5 |
| 12 | 5 | ✚ |

The sum for each column and row is given.

▱ = _____      🌷 = _____

---

98, _____, _____, _____, _____, _____, 104

Which number should replace the third blank?

---

What is ten more than 55?

---

Circle the fourth letter.

1, B, 5, 8, Z, D, A, R, F, 9, 2, 8, 9, 6, 3, X, Z, D, F
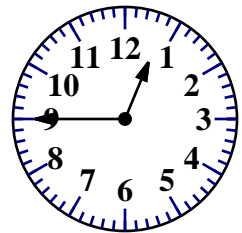
---

14, 13, _____, _____,

_____, _____,

8, _____,

6, _____,

---

5 tens + 0 ones

---

What time is it?

___:___

---

_____, _____, 2

D, H, L, P, _____, X

---

12, 14, 16, 18, _____, 22, 24, 26

---

How much is this?

1¢   5¢   10¢

**Name:** _____

Find 2 equations hidden in each box.  Good luck!

8 + 3

9 + 0

13

1 + 3

9

15

6 + 1

11

Write 2 equations: _____    _____

3 + 4

4

5

9 + 1

7 + 1

3 + 2

8

5 + 9

Write 2 equations: _____    _____

7

9 - 1

7 - 3

6

0

6 - 0

1

4

Write 2 equations: _____    _____

Math Puzzles