Name:
Ethan, Jessica, and Victoria are competing in the Olympics. They are each from a different country (China, Bermuda, and Argentina), and they are also each competing in a different event (biathlon, luge, and bobsled).

Figure out the country each person is from and the event he or she is competing in. (Assume that each hint refers to one of the three people. For example, if Ethan has lunch with someone she met from another country, then assume that this person is among one of the three people).

1. The person competing in the luge event is from South America. This is her second time to represent her country at the games.
2. Jessica had lunch with someone she met. The person she met is competing in the luge event.
3. The person from Argentina and her friend invited the person from China to dinner. The person from China thought it was a great idea, and he gladly accepted.
4. Ethan had lunch with someone he met. The person he met is competing in the luge event.
5. The person competing in the biathlon event is from North America. This is her third time to represent her country at the games.


Round the decimal 0.635 to the nearest hundredth.

How many meters are there in 74 kilometers?

Name:
Complete each pattern. Write what the rule is.

| 5 | 40 | 320 | 2,560 | 20,480 | 163,840 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 7 | 49 | 343 |  | 16,807 |
| 3 | 15 |  | 375 | 1,875 | 9,375 |
| 4 |  | 144 |  | 5,184 | 31,104 |

Complete each pattern. Write what the rule is. Hint: Look at movement of digits!

| 982257, 798225, 579822, 257982, 225798, 822579, 982257, |
| :---: |
| $798225,579822,257982,225798,822579, \ldots$, |
| $942987,794298,879429, \ldots, 298794,429879, \ldots$ |

Name:
Cross off the number that does NOT belong.

$$
\begin{gathered}
4,4,2,4,4,4,4,4,2,4,4,4,4,4,4 \\
4,4,2,4,4,4,4,4,4,4,2,4,4,4
\end{gathered}
$$

$\qquad$ not belong in the pattern?

Cross off the number that does NOT belong.

$$
\begin{gathered}
5 \frac{3}{9}, 5,4 \frac{6}{9}, 4 \frac{5}{9}, 4 \frac{3}{9}, 4,3 \frac{6}{9}, 3 \frac{3}{9}, 3, \\
2 \frac{6}{9}, 2 \frac{3}{9}, 2,1 \frac{6}{9}, 1 \frac{3}{9}, 1, \frac{6}{9}, \frac{3}{9}
\end{gathered}
$$

Why does $\qquad$ not belong in the pattern?

Name:

## Sudoku Sums of 13

Each row, column, and box must have the numbers 1 through 9. Hint: Look for sudoku sums. The sum of the two boxes inside of the dashed lines is 13 .

Here is an example of a sudoku sum of 13 :


|  | 5 |  |  |  |  |  |  | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 4 | 6 |  | 7 |
|  | 7 |  |  |  |  |  | 3 |  |
|  |  |  | 6 | 9 |  | 8 | 7 |  |
| 5 |  | 9 |  | 4 |  | 1 |  |  |
| 6 |  |  | 1 |  |  | 5 |  |  |
|  | 6 | 8 |  |  |  |  | 1 |  |
|  |  | 5 |  | 1 |  |  |  | 6 |
| 9 |  |  | 2 |  |  |  |  |  |

5-8 =
$6-11=$
On a number line, what is the number that is 5 spaces right of -2 ?

Name:
Cross off the number that does NOT belong.
$45,47,49,51,53,57,63,69,77,85,95,105,117,129,143$

Why does $\qquad$ not belong in the pattern?

Cross off the number that does NOT belong.

$$
8,6,16,11,12,24,16,32,21,40,26,48,31,56
$$

Why does $\qquad$ not belong in the pattern?

Name:
Christina, Amanda, Connor, and Brittany have one of the following jobs: programmer, writer, librarian, and carpenter. Their salaries are $\$ 50,000, \$ 48,500, \$ 47,300$, and $\$ 53,400$. Figure out the salary and job for each person.

1. The carpenter earns more than the librarian.
2. Amanda is not a programmer or a librarian.
3. Brittany is not a carpenter or a writer.
4. Christina is not a writer or a librarian.
5. The programmer earns more than the librarian.
6. Amanda is not a librarian or a writer.
7. The librarian does not earn $\$ 48,500$.
8. The programmer earns $\$ 48,500$.
9. The writer earns more than the librarian.
10. The writer earns $\$ 53,400$.
11. The carpenter does not earn $\$ 48,500$.
12. The writer earns more than the programmer.

Brittany is the $\qquad$ and has a salary of $\qquad$
Christina is the $\qquad$ and has a salary of $\qquad$
Amanda is the $\qquad$ and has a salary of $\qquad$
Connor is the $\qquad$ and has a salary of $\qquad$

## What is the greatest common factor of 18 and 14?

> What is the greatest common factor of 8 and 10 ?

What is the least common multiple of 9 and 12?

Name:
Each row, column, and box must have the numbers 1 through 9 .

|  | 9 | 7 |  | 3 |  |  | 8 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6 |  | 3 |  |  |  | 2 | 9 | 5 |
| 4 | 8 | 2 | 9 |  |  | 3 | 7 |  |
| 3 | 1 | 9 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 2 |  |  | 3 |  |  | 9 | 6 |  |
|  |  |  | 6 |  | 9 | 8 |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Write the missing family fact.
$15 \times 5=75$
$5 \times 15=75$
$75 \div 15=5$

What is the area of a rectangle with sides 2 cm and 11 cm ?

Know how many inches in a foot? Okay, smarty pants, how many inches in 8 feet?
$(9+5)+3=$
Circle the greatest number:
231,698 4,695,837,201
476,198,023,238 54,075

Name:
Four students (Timothy, Alexandra, Olivia, and Robert) at a school have each been assigned a different id number ( $5,626,4,126,709,85,509$, and 720,151 ). Each of the students is in a different grade (seventh, eighth, second, and first).

Figure out the id number and grade level for each student.

1. The largest place value in Robert's ID number is the hundred millions digit.
2. Timothy's number is one hundred more than five thousand, five hundred twenty-six.
3. The student in the eighth grade has an ID number equal to $100,000+6,000+9+$ $4,000,000+20,000+700$.
4. The ten thousands digit in Alexandra's ID number is three more than the hundreds digit.
5. The student in the eighth grade does not have a five in the thousands digit.
6. The student in the seventh grade has an ID number equal to $6+600+20+5,000$.
7. The tens digit in 81,524 is one more than the grade that Olivia is in.

Timothy has an ID number of $\qquad$ and is in the $\qquad$ grade.

Alexandra has an ID number of $\qquad$ and is in the $\qquad$ grade.

Olivia has an ID number of $\qquad$ and is in the $\qquad$ grade.

Robert has an ID number of $\qquad$ and is in the $\qquad$ grade.

| $8 m=16$ |
| :--- |
|  |

Round the decimal 0.435 to the nearest hundredth.

Round 9,605 to the nearest
$5 y=35$ thousand.



