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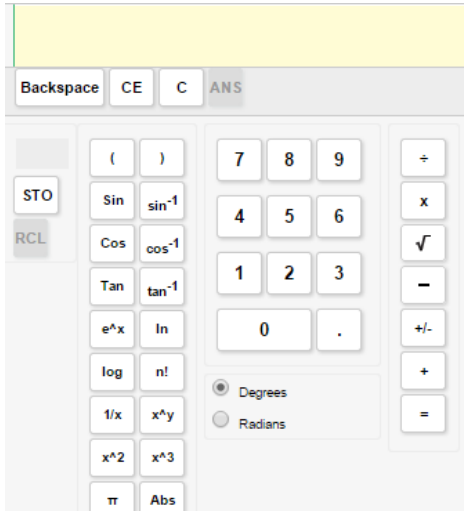
11

Select all the statements that are true about $\frac{22}{7}$.

- [ ] It is a rational number.
- [ ] It is an irrational number.
- [ ] When it is written as a decimal, it terminates.
- [ ] When it is written as a decimal, it repeats.
- [ ] It is an approximate value of pi.
- [ ] When it is written as a decimal, it is equivalent to 3.10.

Multi-Select



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12

An equation is shown.

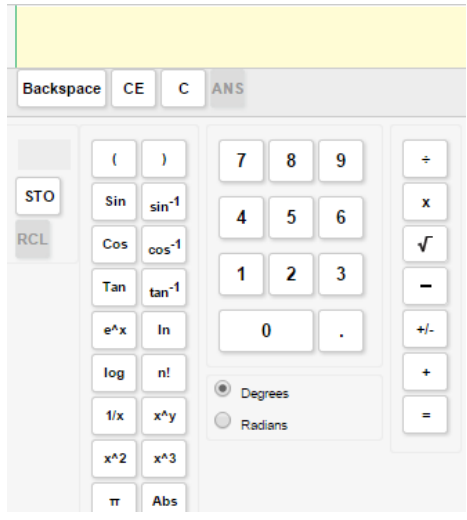
$a^b = c$

Both a and c are less than 0, and b is a positive integer.

State another fact that must be true about b. Give a complete statement to explain your reasoning.

Type your answer in the space provided.

Natural Language (Open Response)



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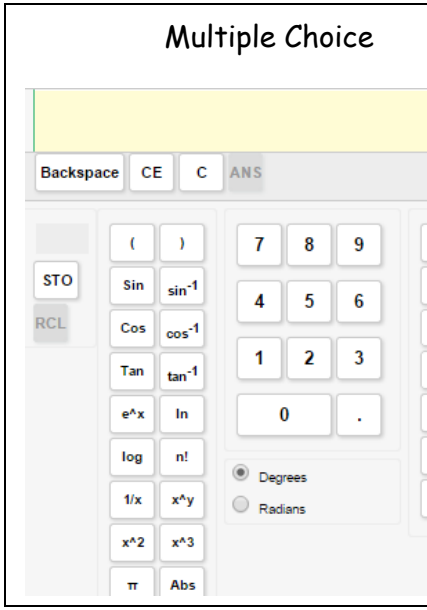
Multiple Choice



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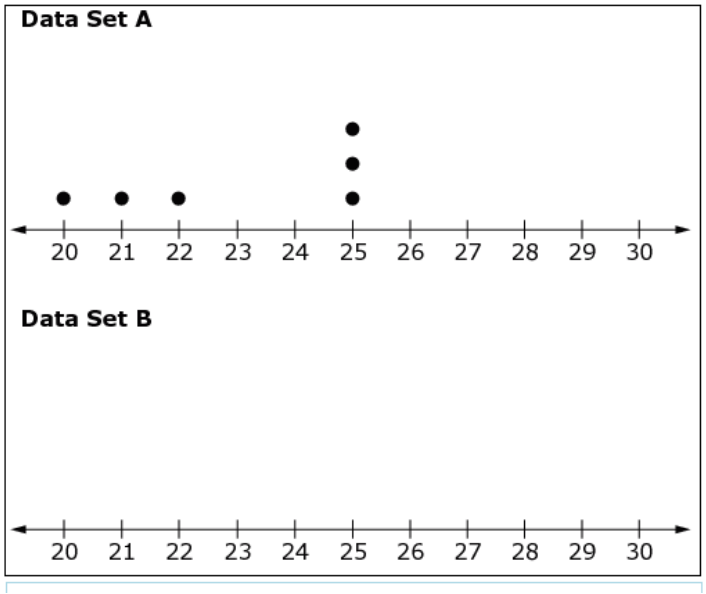
13

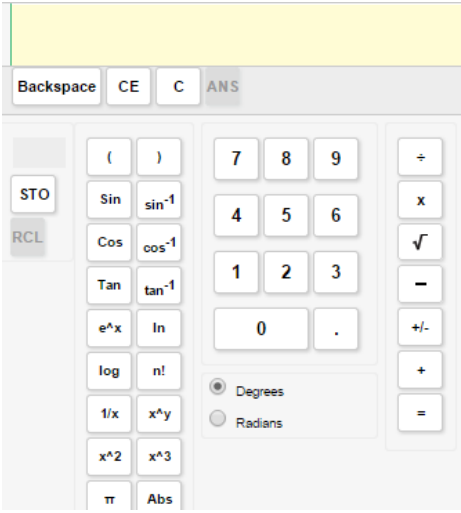
Data Set A is shown.

Data Set A and Data Set B have the same mean absolute deviation. Data Set B has 6 elements.

Create Data Set B so that the mean is 2 mean absolute deviations larger than the mean for Data Set A. Click above the number line to create this data set.



Grid Item



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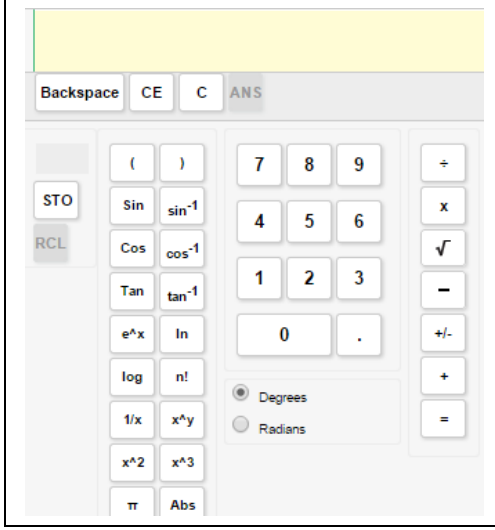
14

Drag **one** set of absolute value symbols to the **right** side of each inequality to make the inequality true.

$$-4 \times 3 - 5^3 < -4 \times 3 - 5^3$$

$$-4 \times 3 - 5^3 > -4 \times 3 - 5^3$$

Grid Item



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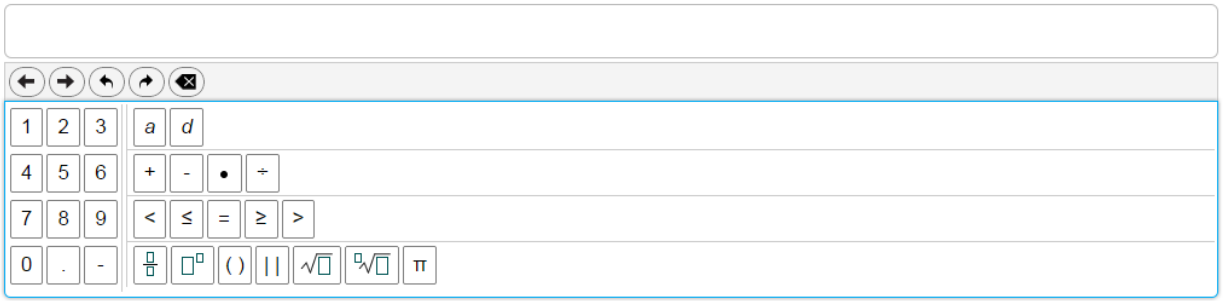
15

The table shows the amount of money in Jody's bank account on certain days.

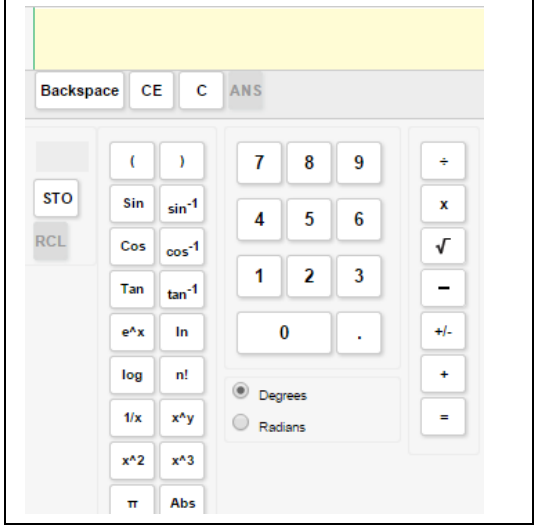
Jody's Bank Account

Day (d)	Amount (a)
2	$ 83
5	$143
7	$183
11	$263
15	$343

Create an equation that models the relationship between the day, d, and the amount of money, a, in Jody's bank account.



Equation



16

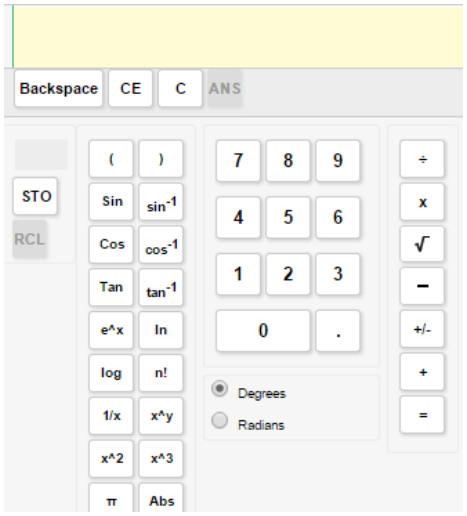
Consider the equation $a^b = b^a$, where a and b are two different whole numbers.

- What is the value of a?
- What is the value of b?

Enter each answer on a separate line.

1 2 3
4 5 6
7 8 9
0 . -

Equation



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17

A system of equations is given.

$7x + 2y = 25$
$2x + 2y = 10$

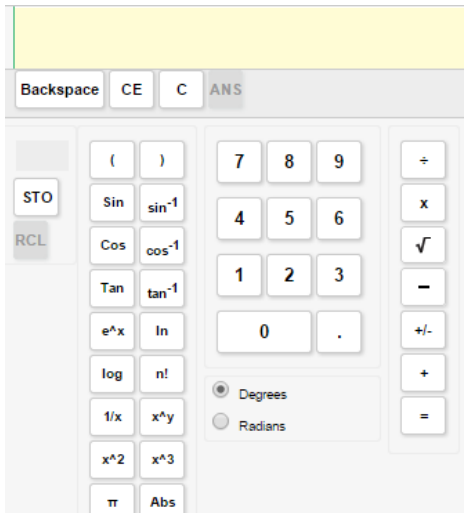
What are the values of x and y in the solution to the system?

$x =$

$y =$

1 2 3
4 5 6
7 8 9
0 . -

Equation



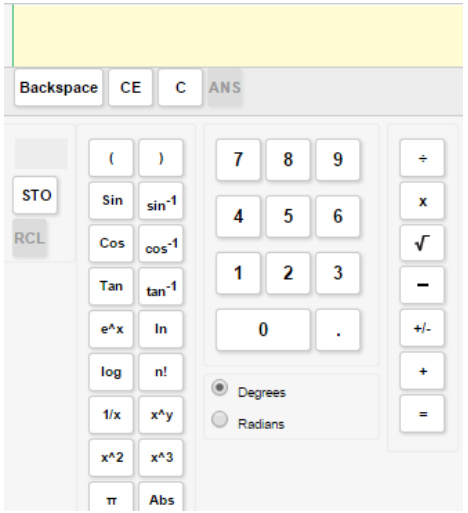
18

Fabiana asks 50 students at her school if they own a bike. She finds that more girls own bikes than boys.

Complete the two-way table to show one possibility for Fabiana's results.

	Own a Bike	Do Not Own a Bike	Total
Boys	12		25
Girls			25
Total			50

Table



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19

Select one phrase that describes the sum or difference of each expression.

	Greater than zero	Less than zero	Equal to zero
$7-(-7)$	☐	☐	☐
$7+(-7)$	☐	☐	☐
$(-7)+(-7)$	☐	☐	☐
$(-7)-7$	☐	☐	☐

Matching