Calculator Skills   Name _____

Parentheses, Exponents, and Integers
Mean is the average of the data. To find the mean you add all the data and then divide that
answer by the amount of numbers in your list.
The negative sign is located near the zero button on most calculators.
To enter a negative number, enter the negative first and the number after that.
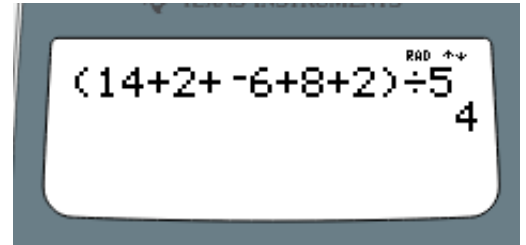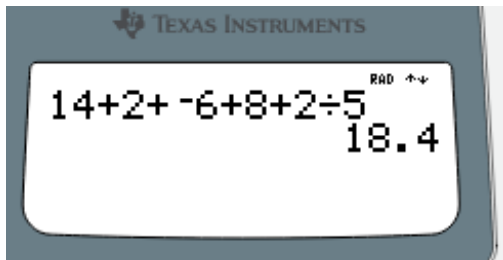**DO NOT use the subtraction sign in place of a negative!**

Example:
Find the mean of the following data: -6, 8, -2, -9, 4

In your calculator: (-6 + 8 + -2 + -9 + 4) / 5

answer = -1

Circle which of the following shows the correct method for finding mean on a calculator:

TEXAS INSTRUMENTS

RAD ↑↓

14+2+ ⁻6+8+2÷5
                18.4

RAD ↑↓

(14+2+ ⁻6+8+2)÷5
                    4

Explain why the calculator gave the wrong answer: _____

_____

Now use your calculator to find the mean of the data:

A) -32, -2, 20, 1, -17, -10, -9   answer: _____

_____

Use grouping symbols *(parentheses)* when using a division bar.

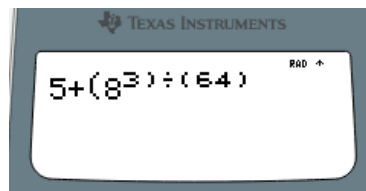Example: $\frac{12+6}{3-1}$ would be entered like this: (12 + 6) / (3 − 1)   answer: _____

Use your calculator to evaluate the expression:

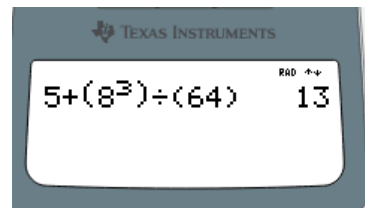B) $\frac{26+9}{4^2-9}$ answer: _____

Now try this example: Did you get an error?
                                    Did it not appear the way you wanted it?

C) $5 + \frac{8^3}{64}$ answer: _____

Hint: After entering the exponent, hit the RIGHT ARROW.
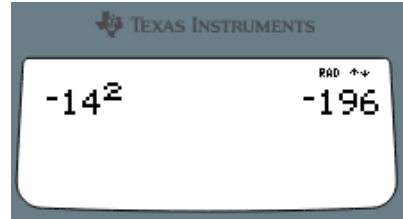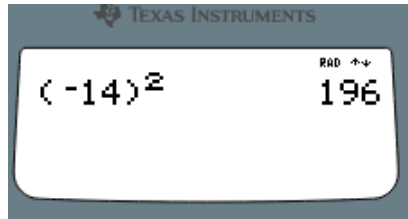
This looks much better:

D) $27[6^3 \div (2^3 + 3^2 + 7)]$ answer: _____

_____

To find the power of a negative number, you need to use parentheses around the integer before using the exponent button.

Example:
negative four to the second power $\longrightarrow$ $(-4)^2 = 16$

Incorrect $\longrightarrow$ ~~$-4^2 = -16$~~

Circle which of the following shows the correct method for finding c^2 when $c = -14$

TEXAS INSTRUMENTS

RAD ↑↓

$(-14)^2$ 196

TEXAS INSTRUMENTS

RAD ↑↓

-14^2 -196

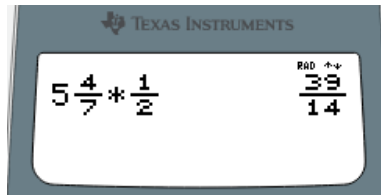E) Now use your calculator to find t^3 when $t = -9$ answer: _____

F) Now use your calculator to find $5w^2$ when $w = -12$ answer: _____

Fraction Operations

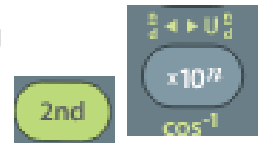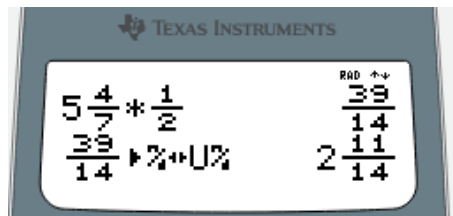**Use the fraction button (** **) to enter a fraction.**

Use the arrow keys to move the cursor.

Find the product: $5\frac{4}{7} \times \frac{1}{2}$

TEXAS INSTRUMENTS

RAD ↑↓

$5\frac{4}{7} * \frac{1}{2}$ $\frac{39}{14}$

But I don't want my answer as an improper fraction…

Then we can change the improper fraction to a mixed number by entering

TEXAS INSTRUMENTS

RAD ↑↓

$5\frac{4}{7} * \frac{1}{2}$ $\frac{39}{14}$

$\frac{39}{14}$ ►%◄U% $2\frac{11}{14}$

2nd   cos⁻¹

Write the answer as a fraction or mixed number in simplest form.

G) $\frac{5}{11} + \frac{7}{9}$ H) $\frac{2}{3} - \frac{2}{5}$

<div style="border:1px solid black;">

Fractions to Decimals

Remember: To change a fraction to a decimal,
you need to DIVIDE the *numerator* by the *denominator*.

</div>

<u>Example #1:</u>

Write the mixed number $15\frac{5}{6}$ as a decimal.

On your calculator enter: $5 \div 6 =$

Calculator screen reads: 0.833333333

Actual Answer = $15.8\overline{3}$

> Even though the calculator <u>stops</u>, it is still a *repeating* decimal. The calculator only has enough room to show ten digits.

Terminating   or   (Repeating) ?

Therefore, $15\frac{5}{6} = 15.8\overline{3}$

<u>Example #2:</u>

Write the mixed number $3\frac{7}{9}$ as a decimal.

On your calculator enter: $7 \div 9 =$

Calculator screen reads: 0.777777778

Actual Answer = $3.\overline{7}$

> Even though the <u>last digit is different</u>, it is still a *repeating* decimal. The calculator rounds the last digit.

Terminating   or   (Repeating) ?

Therefore, $3\frac{7}{9} = 3.\overline{7}$

Write the fraction or mixed number as a decimal. Use bar notation when necessary.

I) $11\frac{7}{11}$　　　　　　　　　J) $\frac{20}{3}$　　　　　　　　　K) $\frac{123}{200}$

To take the **square root** of a number, first hit the "2nd" button followed by the "x^2" button. Once you see the radical sign on your screen, then enter the number.

The area of a square is 225 in^2. What is the length of one side?

Circle which of the following shows the correct method for finding the square root of 225:

TEXAS INSTRUMENTS
RAD ↑↓
$\sqrt{225}$ 15

TEXAS INSTRUMENTS
RAD ↑↓
225^2 50625
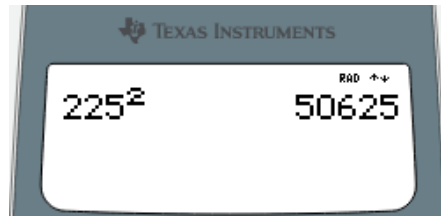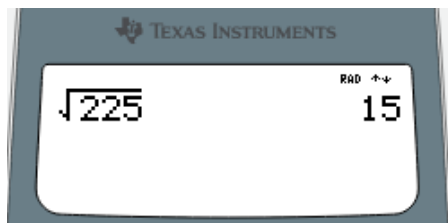
L) The area of a square is 324 in^2. What is the length of one side?

answer: _____

M) The area of a square is 529 in^2. What is the length of one side?
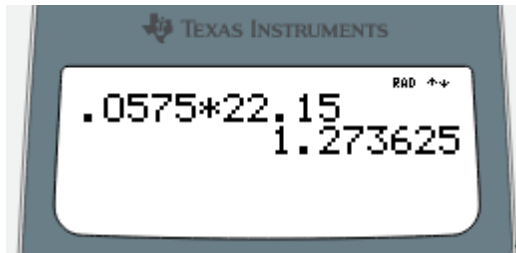
answer: _____

N) The area of a square is 121 in^2. What is the perimeter of the square?
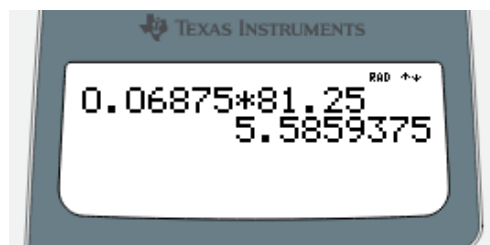
answer: _____

O) I calculated the sales tax. How much money do I owe in sales tax?

```
                        RAD ↑↓
.0575*22.15
            1.273625
```

answer: _____

P) I calculated the sales tax. How much money do I owe in sales tax?

```
                    RAD ↑↓
0.06875*81.25
         5.5859375
```

answer: _____

Q) I calculated the sales tax. How much money do I owe in sales tax?

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                    RAD ↑↓
0.04225*79.88
          3.37493
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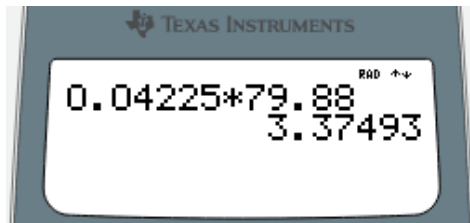
answer: _____

R) I calculated the sales tax. How much money do I owe in sales tax?

```
                    RAD ↑↓
0.056*39.99
         2.23944
```

answer: _____