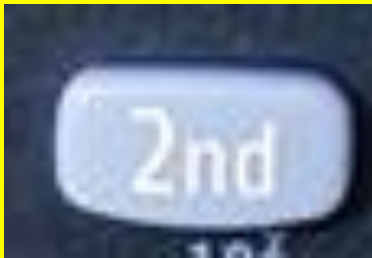


How to use my
TI-30XIIS
Scientific Calculator
(Instructor:
Michelle Mazzucco)

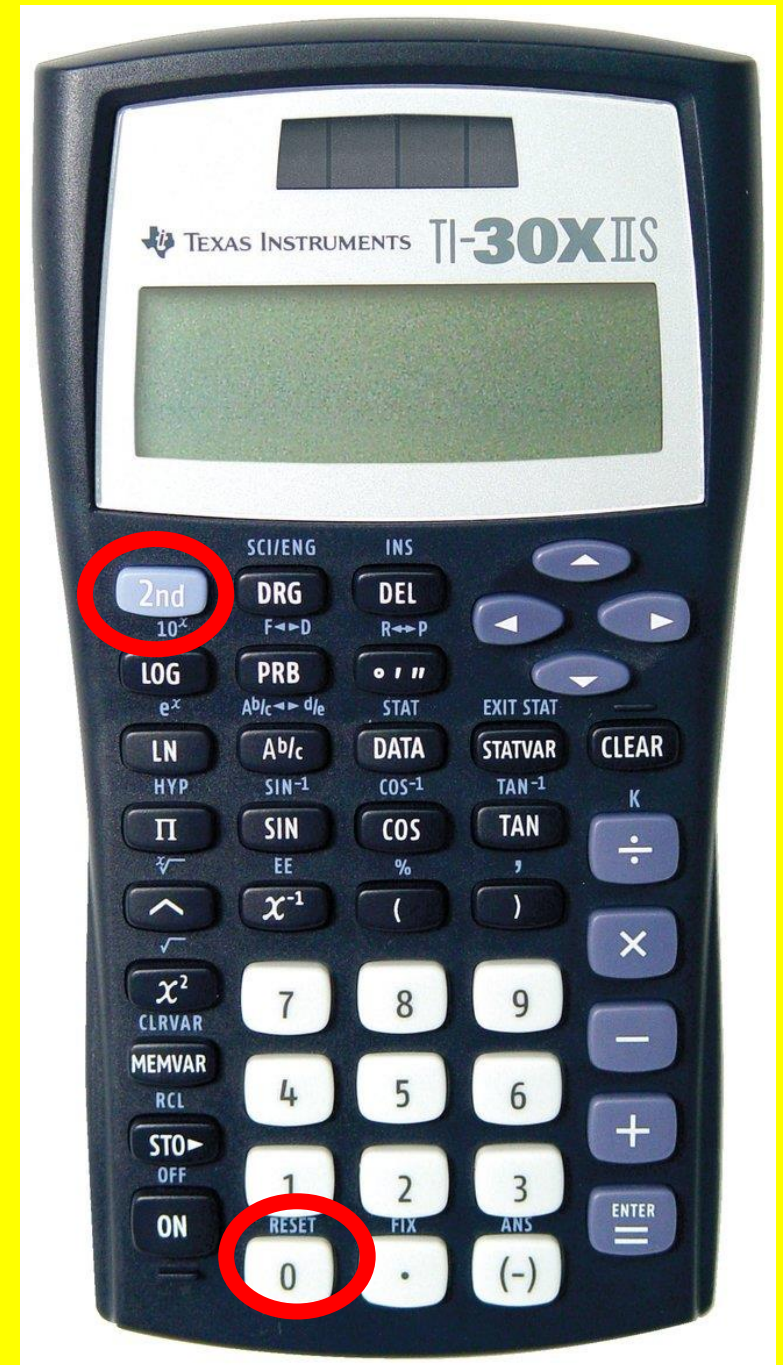
Reset Calculator

Good idea if you're borrowing a calculator to clear the settings.

1)

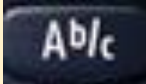
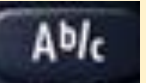

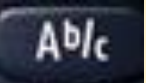



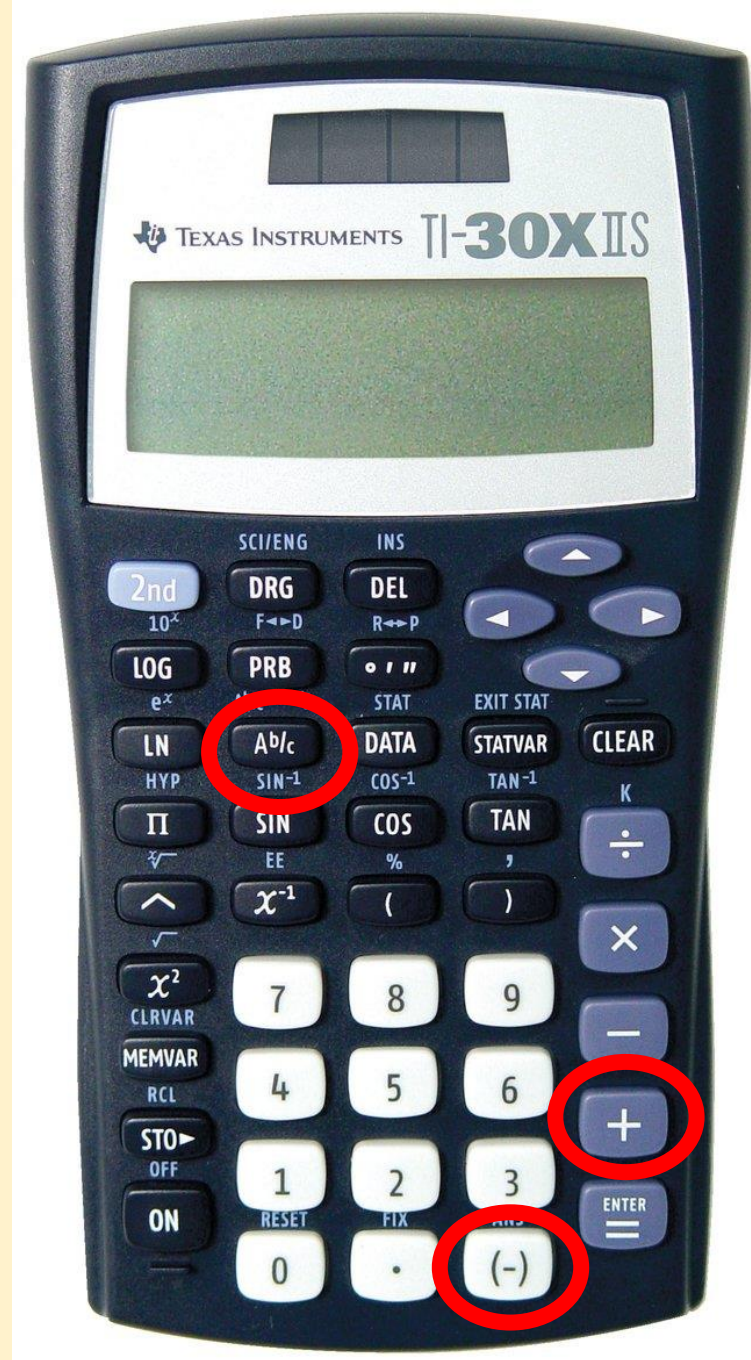
2)



Fractions

Steps:

- 1) 2
- 2) 
- 3) 1
- 4) 
- 5) 5
- 6) 
- 7) 3
- 8) 
- 9) 4
- 10) 



$$2\frac{1}{5} + \frac{3}{4}$$

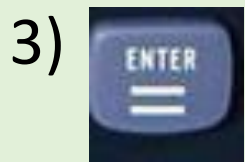
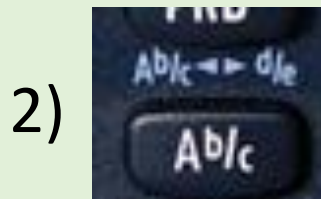
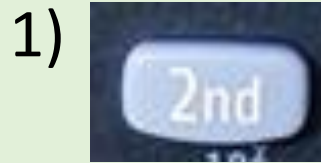
Answer:

$$2\frac{19}{20}$$

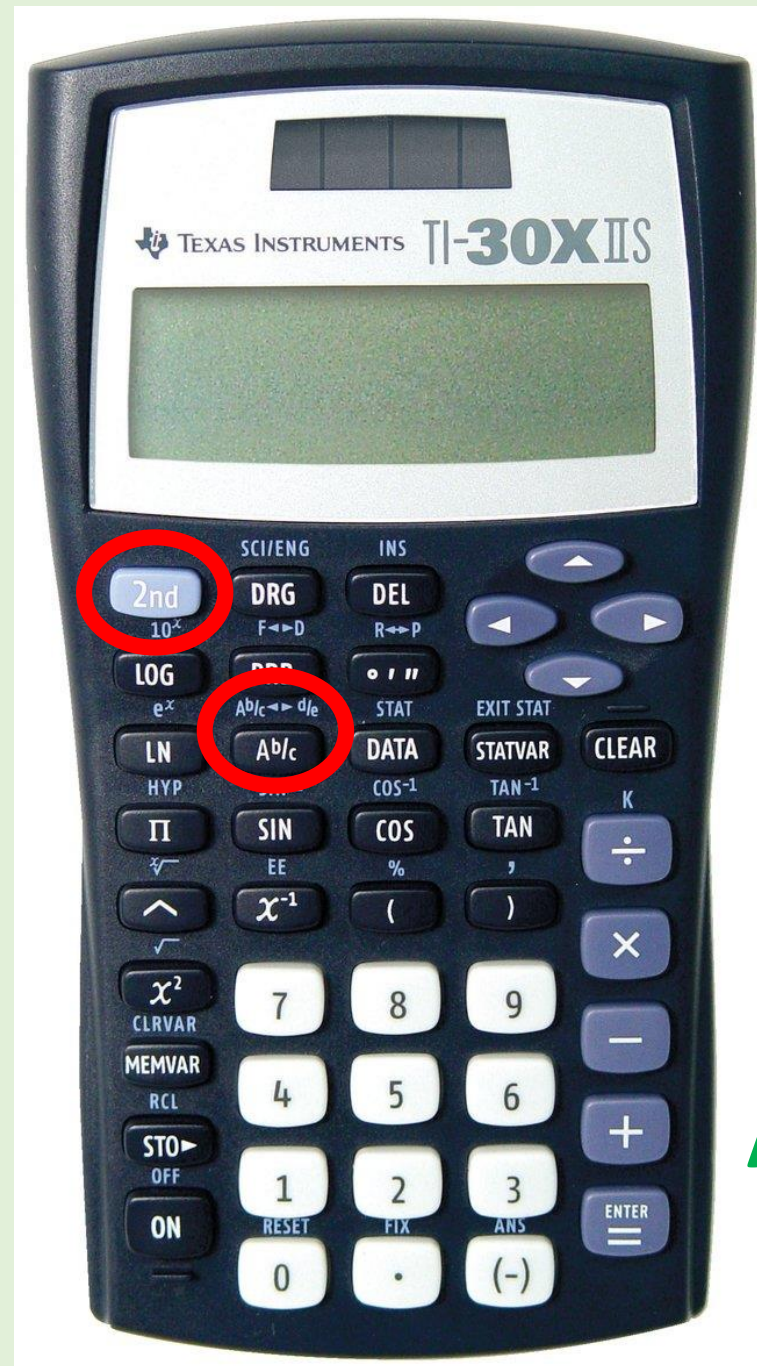
** keep your answer on screen

Change to Improper

$$2 \frac{19}{20}$$



**Keep your answer on screen

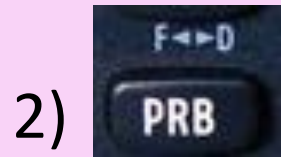
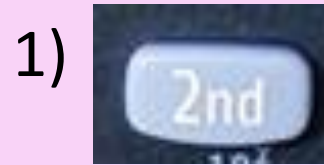


Answer:

$$\frac{59}{20}$$

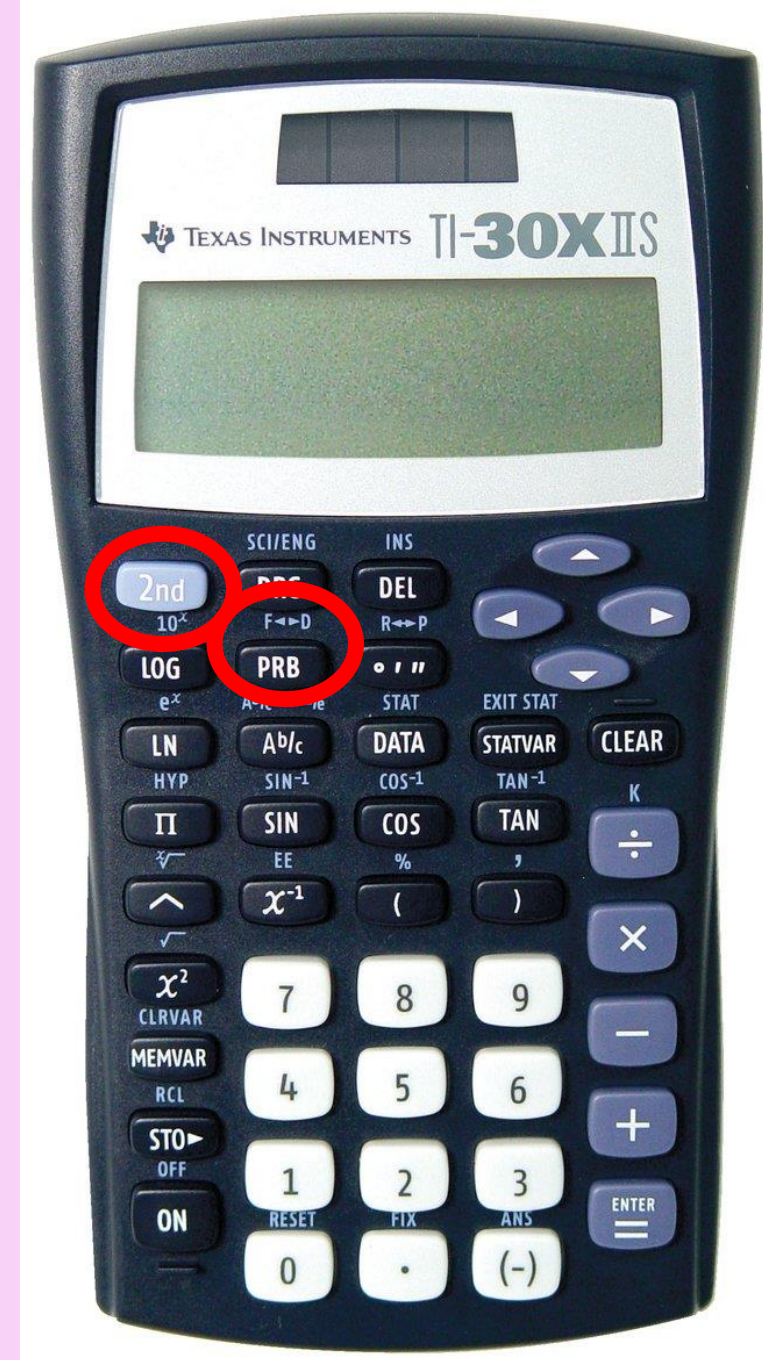
Change your answer to a decimal:

$$\frac{59}{20}$$



**Keep your answer on screen

Answer:
2.95



Decimals to fractions.

Change $\frac{5}{4}$ to a decimal.

1) 5

OR

1) 5

2) 

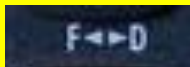
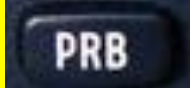
2) 

3) 4

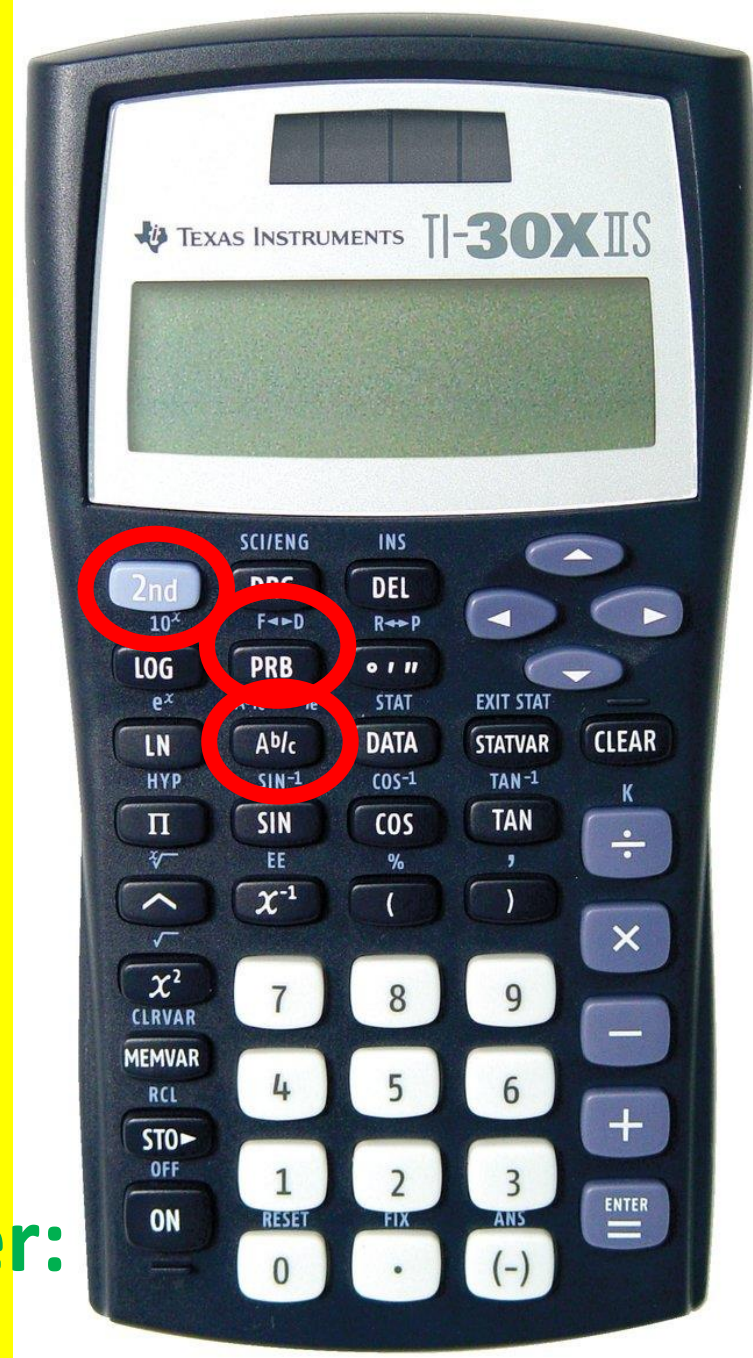
3) 4

4) 

4) 

5) 


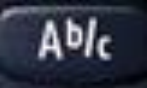
Answer:
1.25



Simplifying Fractions

Simplify: $\frac{12}{8}$

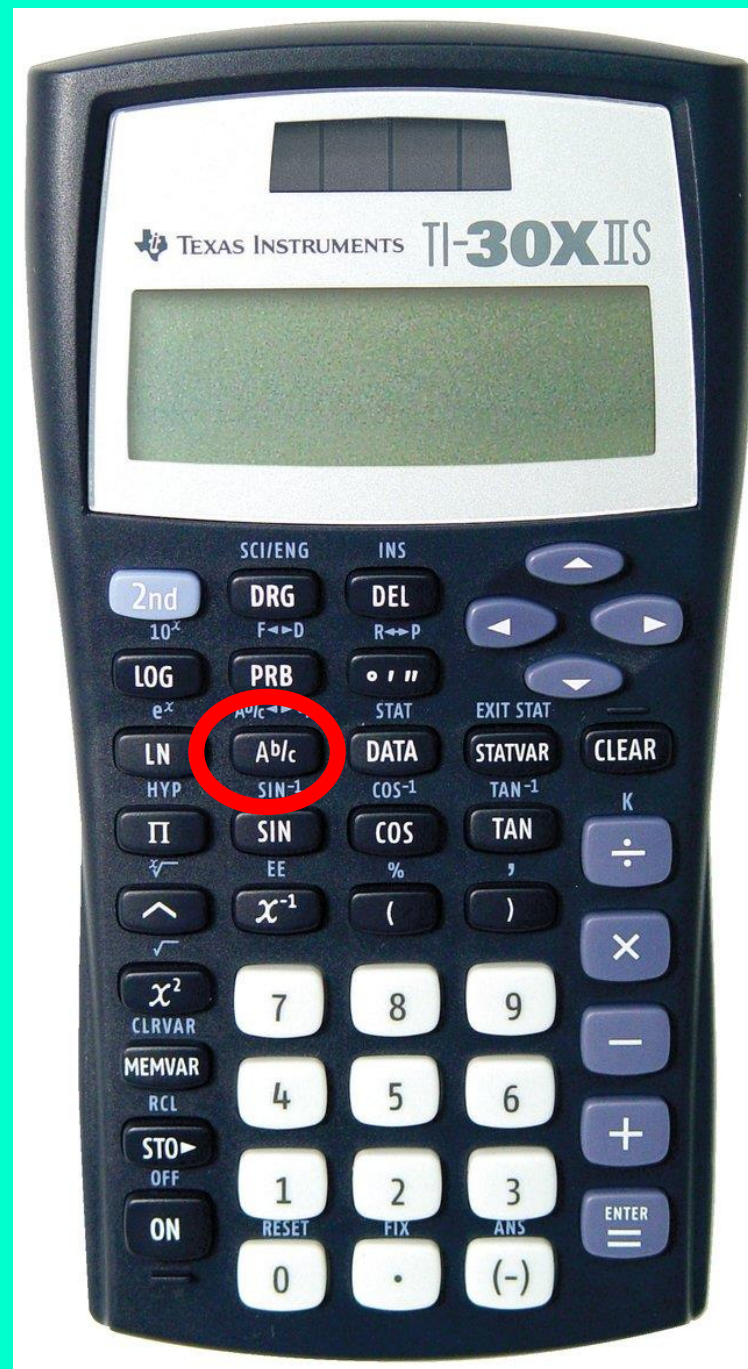
1) 12

2) 

3) 8

4) 

**Practice changing it to an Improper fraction and decimal



Answer:

Mixed: $1\frac{1}{2}$

Improper: $\frac{3}{2}$

Decimal: 1.5

Negatives


Evaluate: $-8 - 10$

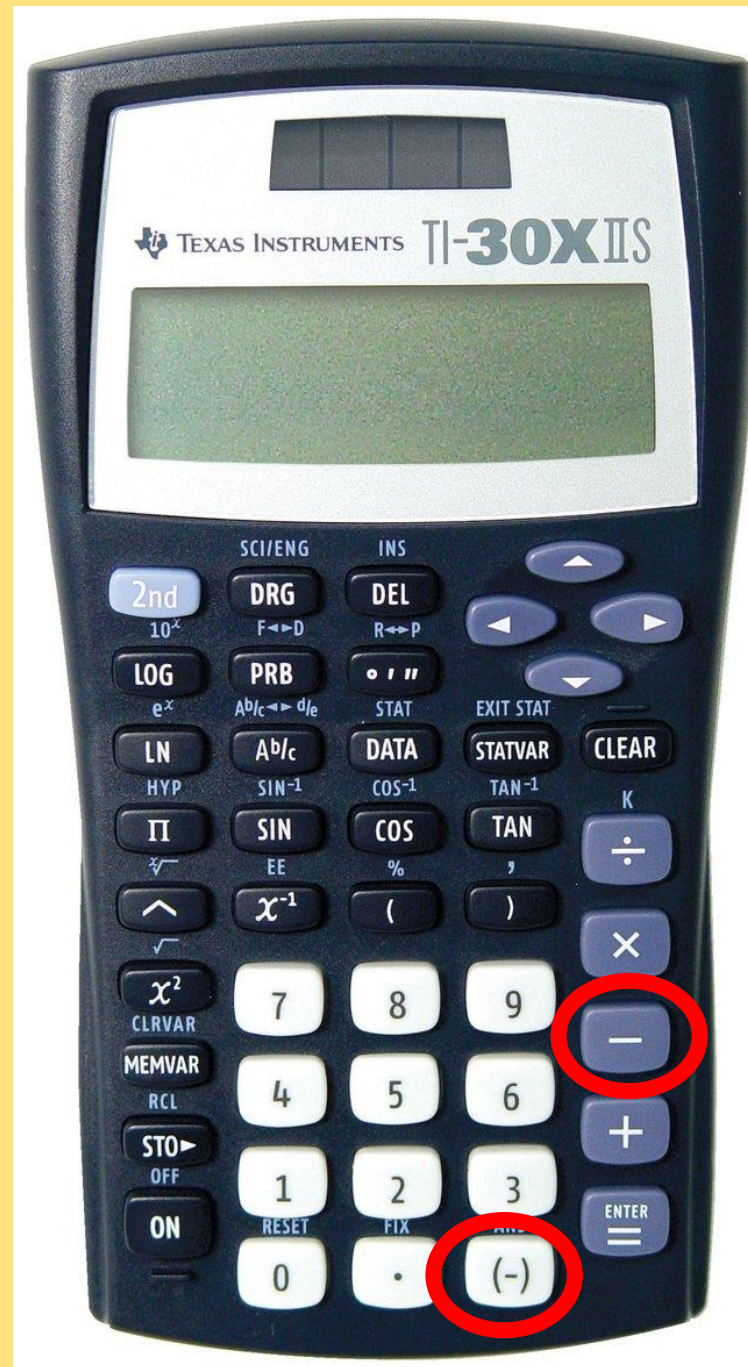
1)  Negative button

2) 8

3)  Subtraction button

4) 10

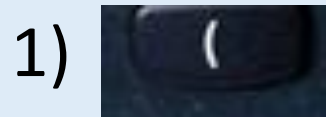
5) 



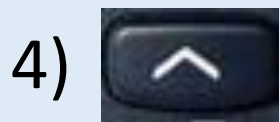
Answer: -18

Exponents

Evaluate: $(-2)^4$



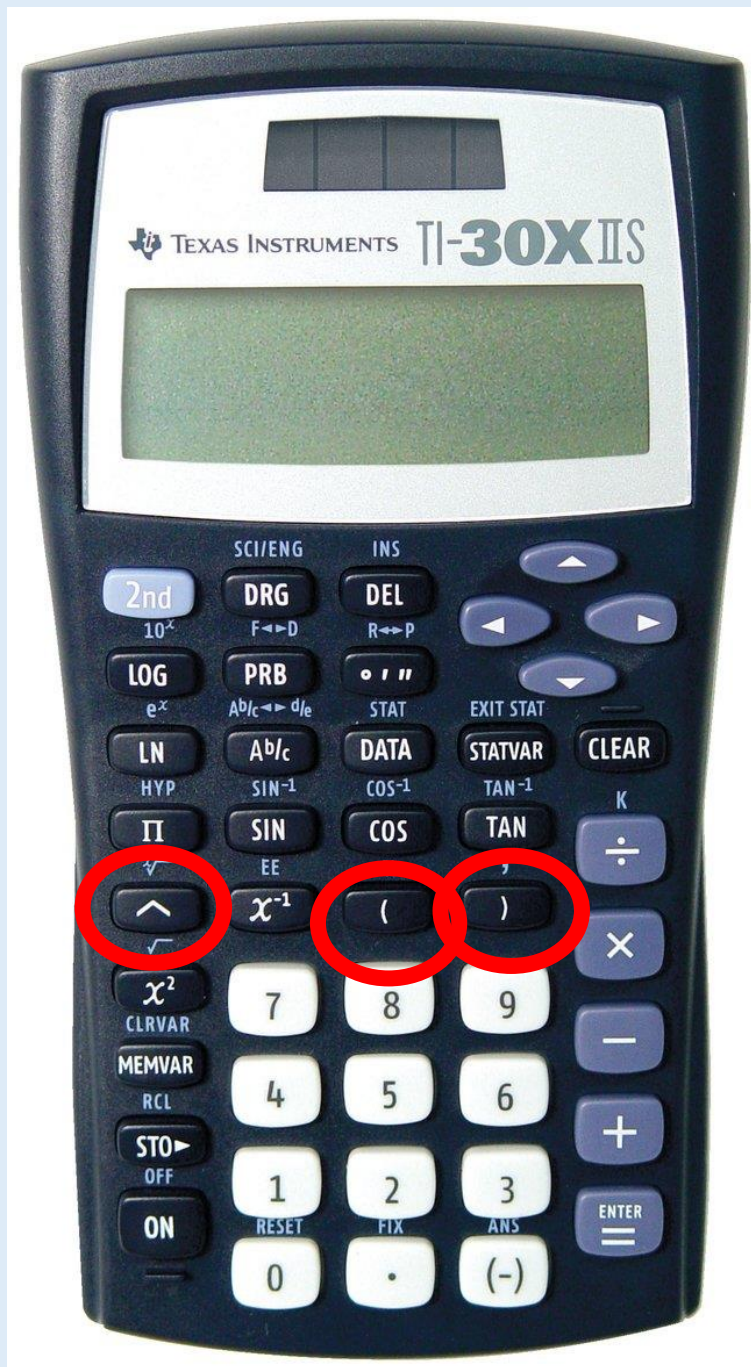
2) -2



5) 4

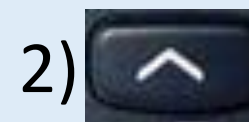


Answer:
16

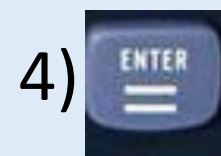


Evaluate: -2^4

1) -2



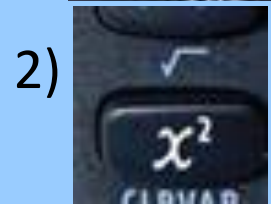
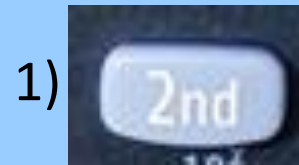
3) 4



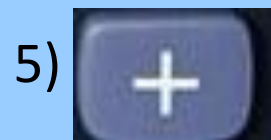
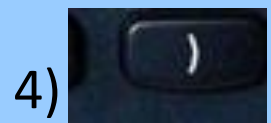
Answer:
-16

Radicals

Evaluate: $\sqrt{25+8}$

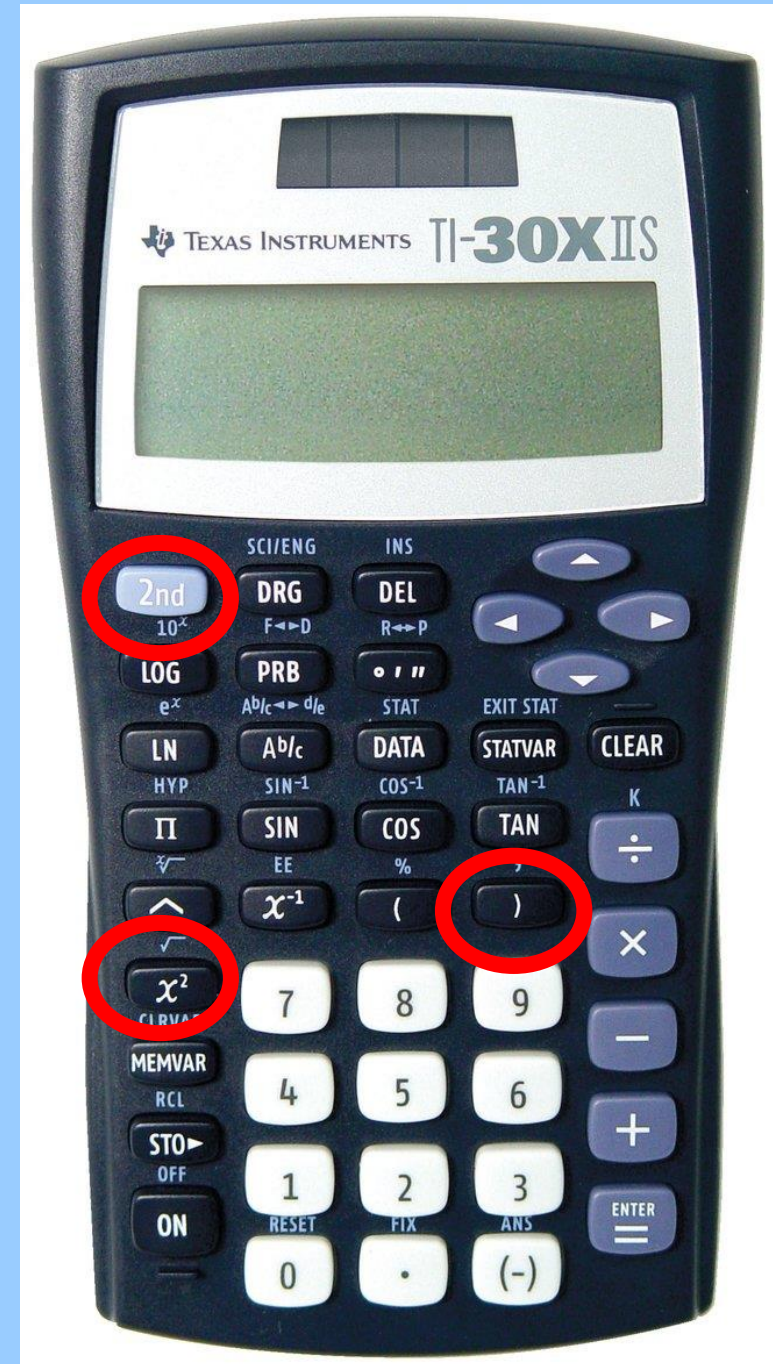


3) 25



8) 8

Answer:
13

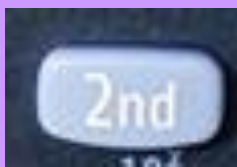


Radicals with index > 2

1) **3**

Evaluate: $\sqrt[3]{27}$

2)

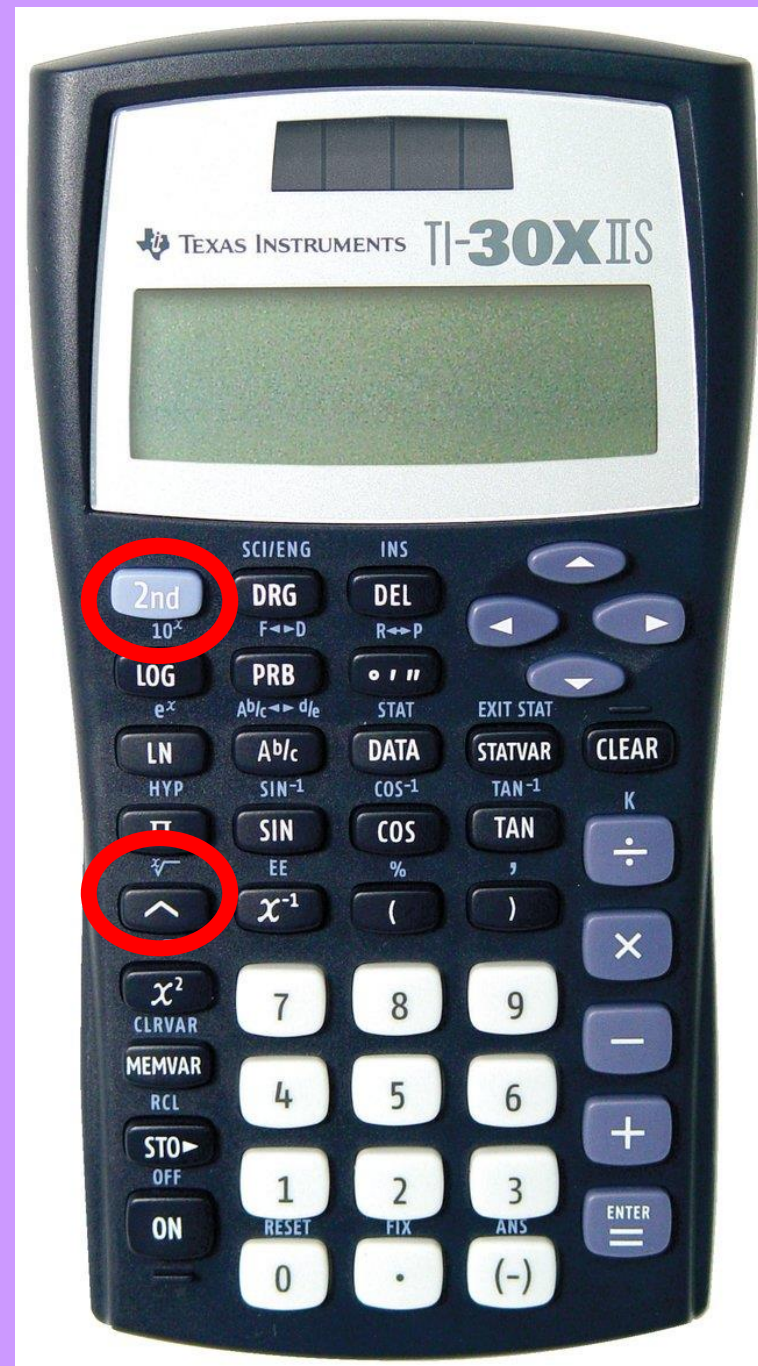


3)



4) **27**

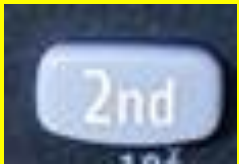
Answer:
3



Parenthesis for grouping

Evaluate: $\sqrt[4]{16} - 3^2$

1) **4**



2)

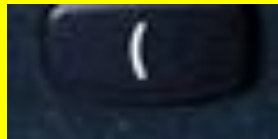
7) **-**

3)



8) **3**

4)

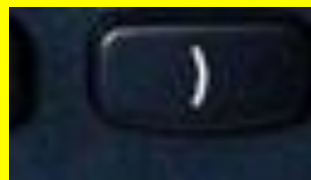


9) 

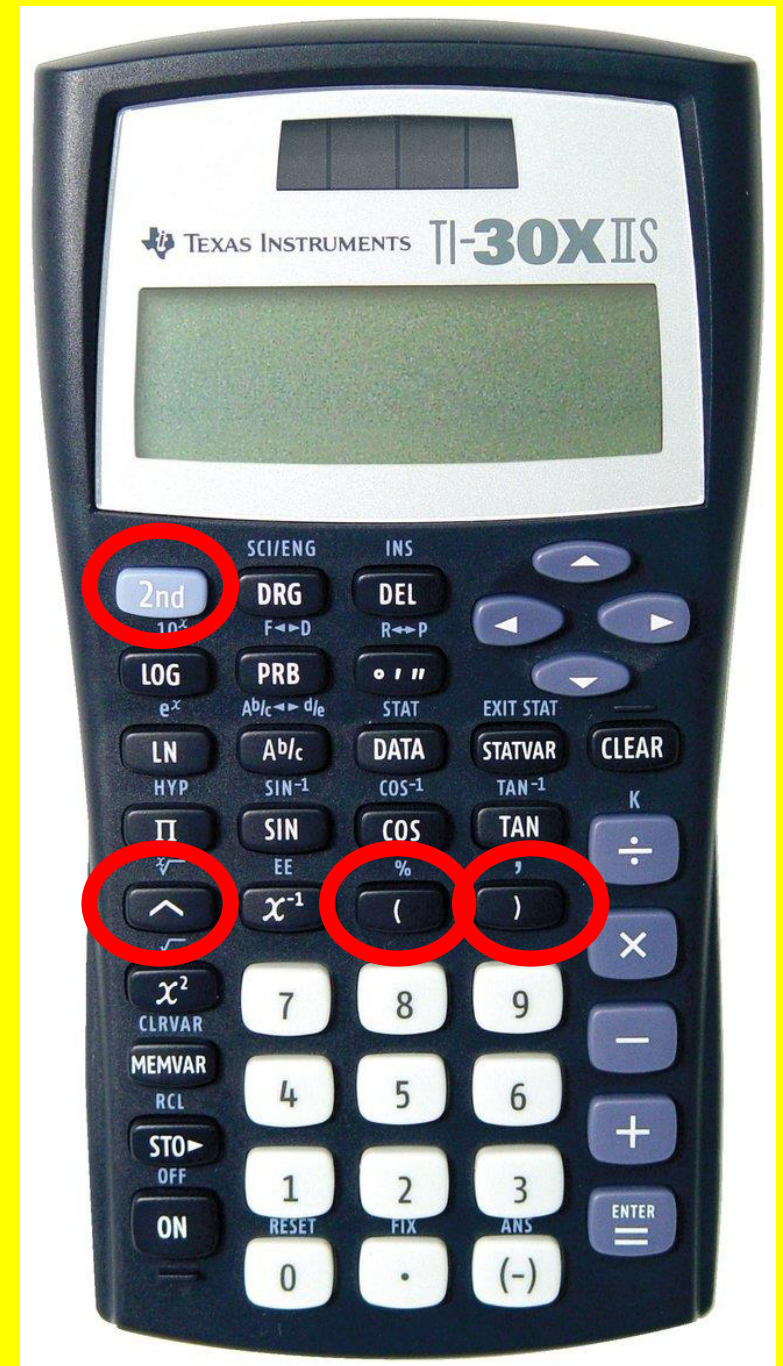
5) **16**

10) **2**

6)



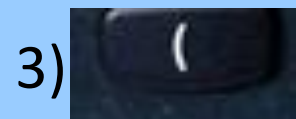
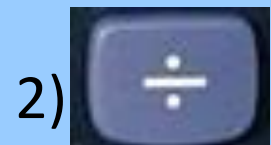
Answer:
-7



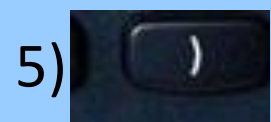
Parenthesis for grouping

Evaluate: $\frac{28}{6+8}$

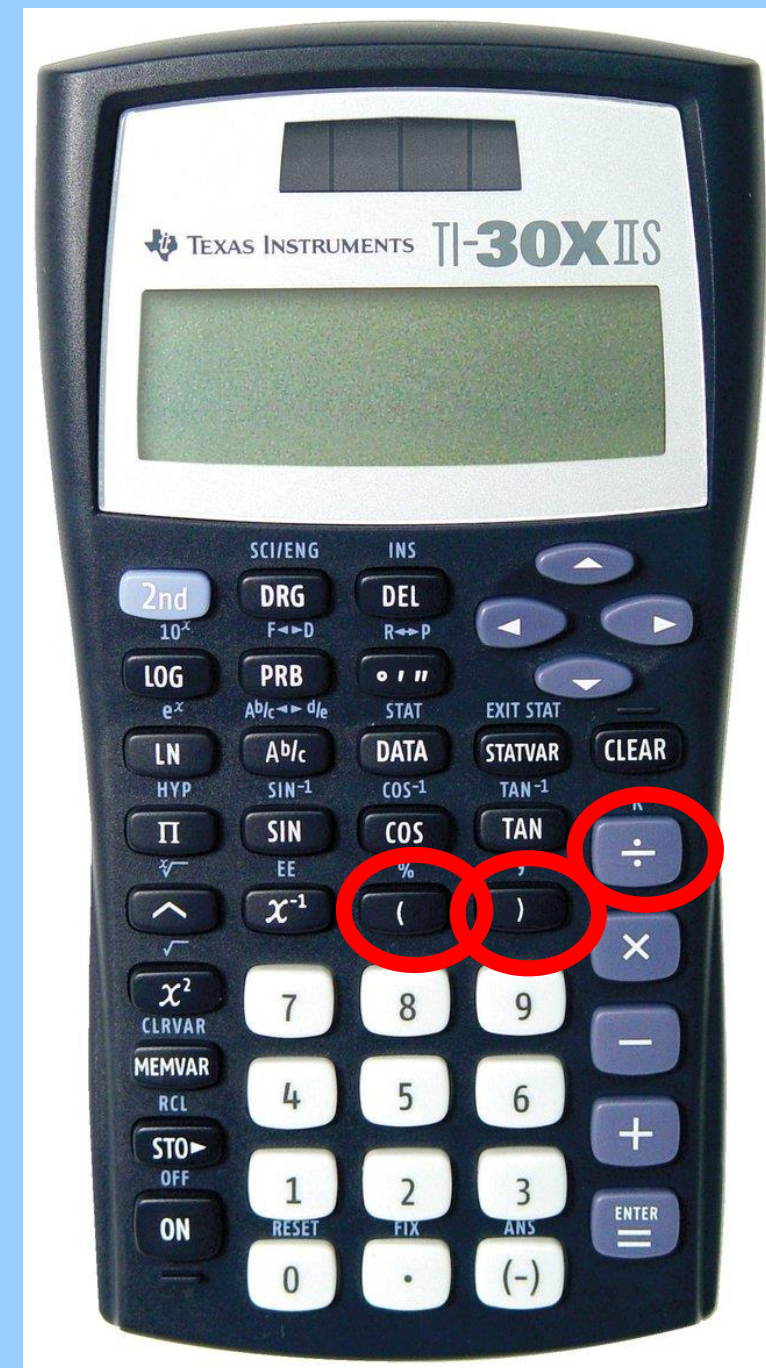
1) **28**



4) **6 + 8**

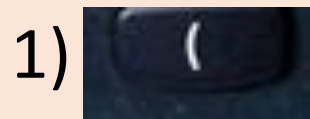


Answer:
2

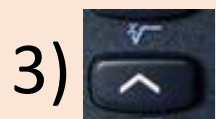


Correcting a problem

Evaluate: $\frac{4^2 + 5}{3}$



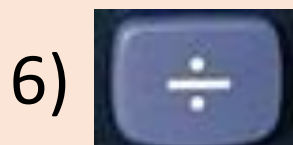
2) 4



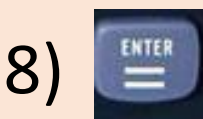
4) 2



4) 2 ← Error

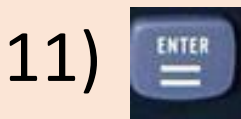


7) 3

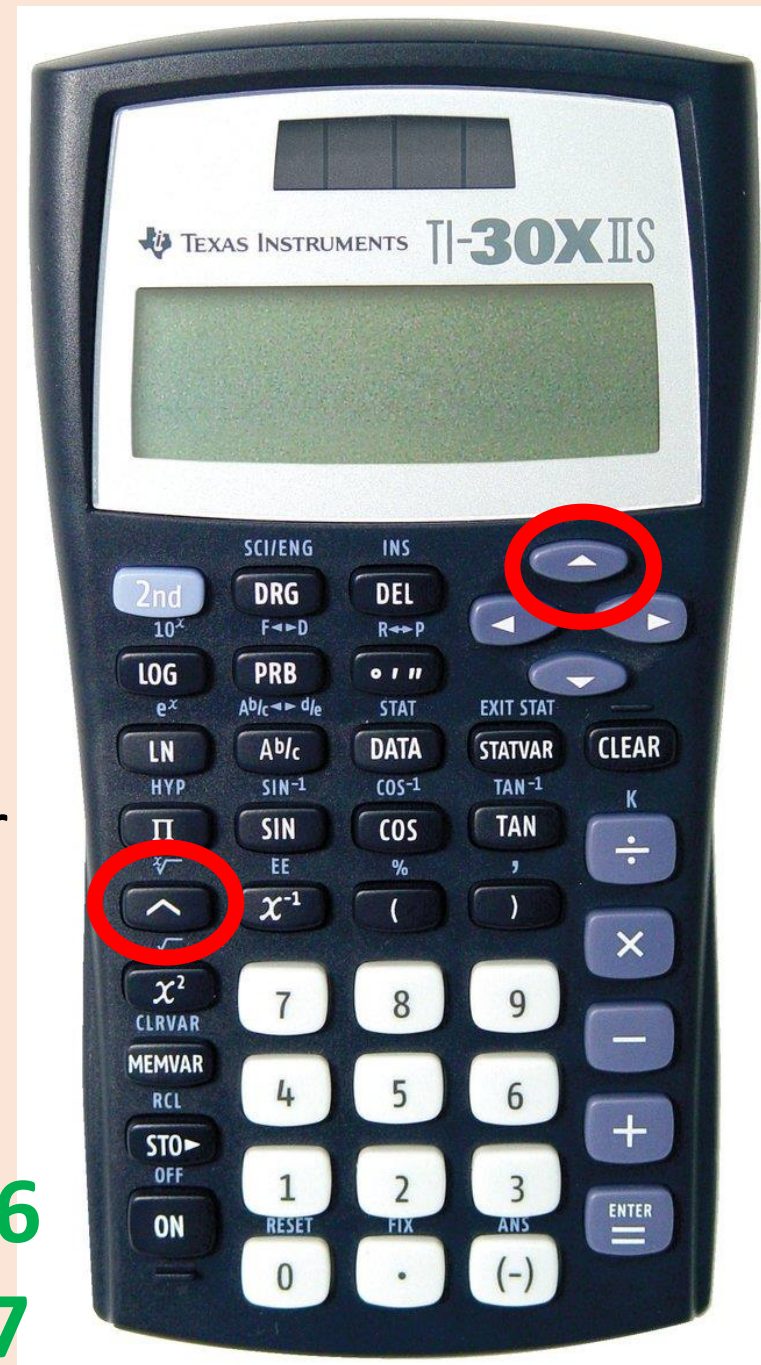


use arrows to fix the error

10) Change 2 to 5



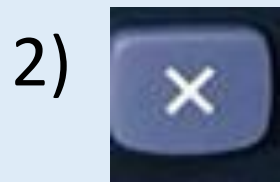
Answer with Error: 6
Corrected Answer: 7



What does x10 mean?

Multiply: $1,045,920 \cdot 540,000$

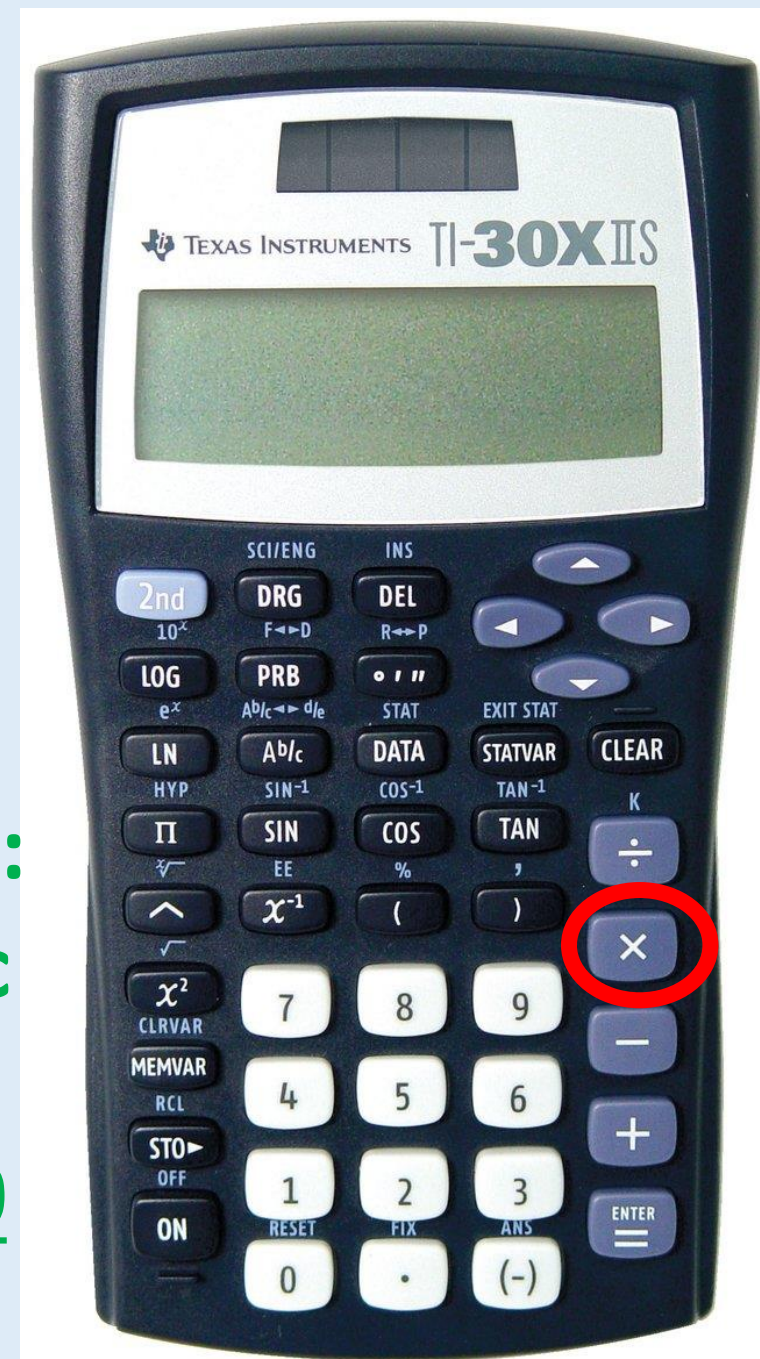
1) **10459200**



3) **54000**

When your calculator says:
 5.647968×10^{11} (Scientific
Notation)

It means: $564,796,900,000$
(standard form)



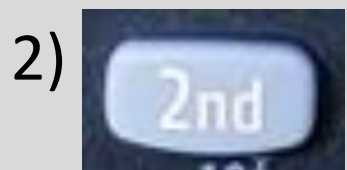
Rounding - BEWARE

Round 13.45609 to the tenths place. 13.5

Round 13.45609 to nearest whole number. 13

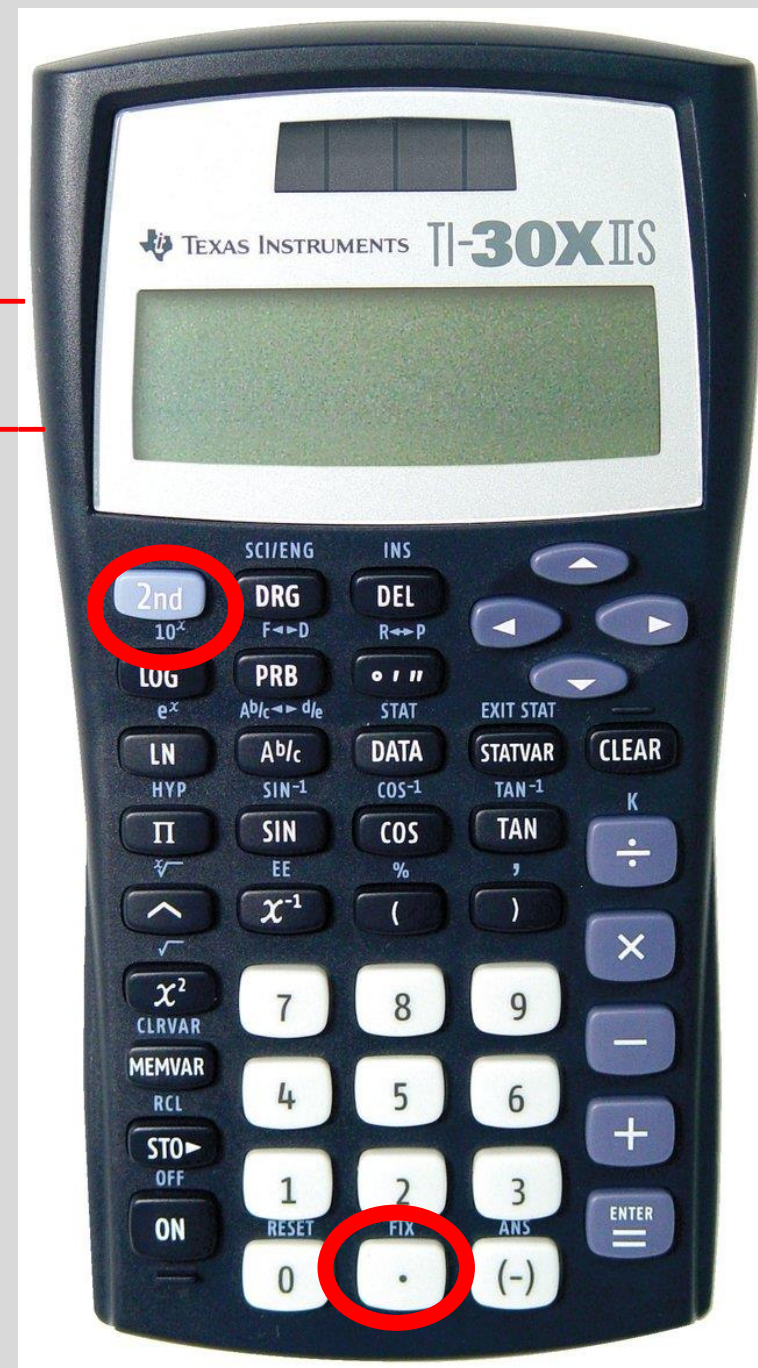
Round 13.45609 to hundredths place. 13.46

1) **13.45609**

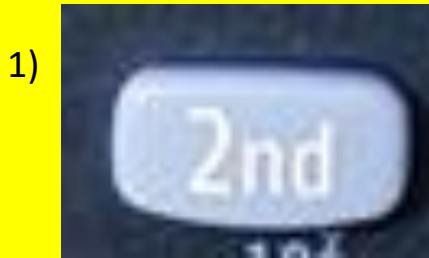


4) Enter the decimal position
(Tenths = 1) (Whole = 0) (Hundredths = 2)

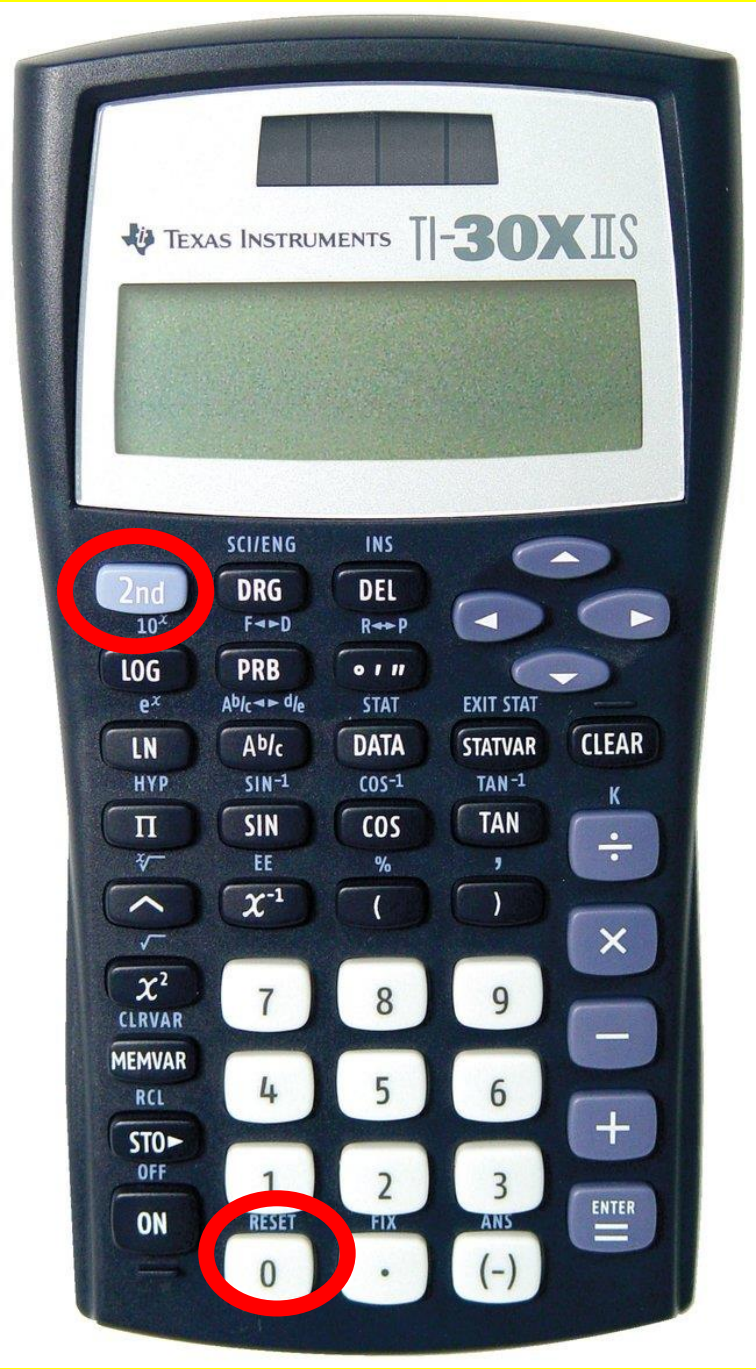
Caution: I wouldn't use this button because people forget to turn it off!!



One semester I had a student borrow a calculator from the MC building and during the middle of the test she came up to me and said she thought something was wrong with her calculator because she knew 3 divided by 4 wasn't 1. Her calculator previously was used by someone who set it to round all answers to the whole number! She had to start over because problems she thought she had completed had been rounding all computations to whole numbers.



Good idea if you're borrowing a calculator to clear the settings.



Any other questions?

You try with your calculator:

$$13) -\frac{1}{3} + 3\frac{1}{2} = \underline{\hspace{2cm}} \text{ Mixed Number} = \underline{\hspace{2cm}} \text{ Improper} = \underline{\hspace{2cm}} \text{ Decimal (Rounded to the hundredths place)}$$

$$14) (-3)^{28} = \underline{\hspace{2cm}} \text{ Scientific Notation} = \underline{\hspace{2cm}} \text{ Standard Form}$$

$$15) 2 + 3\sqrt{9} - 2^3 + 10 = \underline{\hspace{2cm}}$$

You try with your calculator:

$$13) -\frac{1}{3} + 3\frac{1}{2} = \frac{3\frac{1}{6}}{\text{Mixed Number}} = \frac{\frac{19}{6}}{\text{Improper}} = \frac{3.17}{\text{Decimal (Rounded to the hundredths place)}}$$

$$14) (-3)^{28} = \frac{2.287679245 \times 10^{13}}{\text{Scientific Notation}} = \frac{22,876,792,450,000}{\text{Standard Form}}$$

$$15) 2 + 3\sqrt{9} - 2^3 + 10 = \underline{13}$$