M9 - 2.1 - Rounding Notes

Round the following to the Hundreds Place

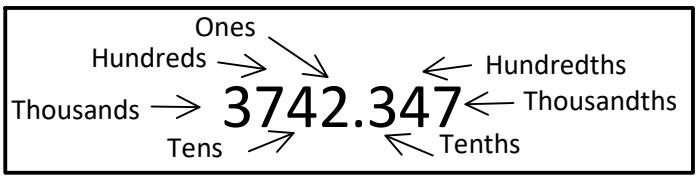
$1754 = 1800$

Round Up

$1734 = 1700$

Round Down

Look at Tens



Look at Place to Right
Round Place Up if 5 or More
Round Place Down if Less than 5

Round the following to the Tens Place

$87 = 90$ $84 = 80$

$8 = 10$ $2 = 0$

$186 = 190$ $11.3 = 10$

Round of the following to the Ones Place

$31.56 = 32$ $123.2 = 123$

$39.5 = 40$

Round Twice

Round the following to the Tenths Place

$0.172 = 0.2$

$0.146 = 0.1$

Round the following to the Hundredths Place

$0.176 = 0.18$

$0.172 = 0.17$

M9 - 2.2 - Scientific Notation Notes

Check on Calculator/Reverse

Write in Standard Form (Normal)

$5.0 \times 10^2 =$ 500. Move the Decimal 2 to the Right $10^2 = 100$

$8.43 \times 10^5 =$ 843000. Move the Decimal 5 to the Right $10^5 = 100000$

Positive Exponent : Decimal to Right

$243. \times 10^{-4} =$ 0.0243 Move the Decimal 4 to the Left $10^{-4} = 0.0001$

Negative Exponent : Decimal to Left

Write in Scientific Notation

$\#.\#\# \ldots \times 10^{\#}$ $1\ \#\ (1-9)$ in front of decimal

$9624. =$ 9.624×10^3 Move the Decimal 3 to the Left $10^3 = 1000$

$5000000. =$ 5.0×10^6 Move the Decimal 6 to the Left $10^6 = 1000000$

$0.000000367 =$ 3.67×10^{-7} Move the Decimal 7 to the Right $10^{-7} = 0.0000001$

Write in Scientific Notation

$0.00367 \times 10^5 = 367. =$ 3.67×10^2

Move the Decimal 5 to the Right
Write in Standard Form
Move the Decimal 2 to the Left

OR

$0.00367 \times 10^5 =$ 3.67×10^2

Move the Decimal 3 to the Right
Subtract 3 from Exponent

$5234. \times 10^{-2} = 52.34 =$ 5.234×10^1

Move the Decimal 2 to the Left
Write in Standard Form
Move the Decimal 1 to the Left

OR

$5234. \times 10^{-2} =$ 5.234×10^1

Move the Decimal 3 to the Left
Add 3 to Exponent

Decimal Right <-> Exponent Down Decimal Left <-> Exponent Up

$5 \times 10^0 = 5$ $10^0 = 1$