7th Grade
Lesson 42

- I can write a repeating decimal with a bar over the repetend.
- I can round a repeating decimal.

Quotients with repeating decimals:

$$6\overline{)43.00000\ldots} \quad 7.1666\ldots = 7.1\overline{6}$$

42
10
6
40
36
40
36
40
36
4

$$11\overline{)3.50000\ldots} \quad 0.318181\ldots = 0.3\overline{18}$$

33
20
11
90
88
20
11
90
88
20

The repeating digits of a decimal number are called the **repetend**.

Repeating decimals are written with a bar over the repetend.

0.0833333... $0.08\overline{3}$

5.142857142857142857...

$5.\overline{142857}$

454.5454545... $454.\overline{54}$

Round each number to five decimal places:

$5.31\overline{6}$

5.3166666...

5.31667

$25.\overline{405}$

25.405405405...

25.40541

Divide 1.5 by 11 and write the quotient

a) with a bar over the repetend.
b) rounded to the nearest hundredth.

$11\overline{)1.5}$

a) $.1\overline{36}$

b) .14

Assignment:

Problem Set 42

**A/B Optional Assignment: #5, 9, 19, 20*