Chapter 5 section 1
Introduction to Decimals

Digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

Number line:
Move one column to the left; place value is 10 times larger than preceding column.
Move one column to the right; place value is 1 tenth time as larger than preceding column.

Diagram for place value

Decimal number   12.3456
Three parts.
 - Whole number part   left of decimal point   12
 - Decimal point
 - Fractional part   right of decimal point   3456

Pronounce
1234.56
Read
        Whole number part and fractional part
        Read fractional part by reading whole number, followed by the place value of the right most column

One thousand two hundred thirty four and fifty six hundredths

Decimal to fraction
Read the number and write.
134.12

One hundred thirty four and twelve hundredths. $134\dfrac{12}{100}$

Try: 0.35

Decimal to improper:
134.12

Write the decimal number in numerator without decimal point
Count decimal places. Places equal the number of zeros in denominator.

$\dfrac{13412}{100}$

Try: 27.198

Rounding
Rounding digit immediately to right of test digit.

16.254   round to tenths   2 in tenths place, look to right, 5, increase 2 to 3 and drop the digits after the rounding digit.
16.3

Try: 8.7463   Round to the hundredths.

Comparing Decimal
          Same number of decimal places
          Align the decimal point
          Compare digits from left to right
          For positive numbers
                    Greatest digit larger number
          For negative numbers
                    Greatest digit is smaller number.

4.25   4.227 Which number is larger.

4.250
4.227

4.25 is larger.

Try:
Find the larger number
a) 8.34   8.348   b) - 4.25   - 4.227