Name _____ Date_____

The Division Algorithm—Converting Decimal Division

into Whole Number Division Using Fractions

1. Lisa purchased almonds for $3.50 per pound. She spent a total of $14.70. How many pounds of almonds did she purchase?

2. Divide: $125.01 \div 5.4$. Then, check your answer for reasonableness.

1. Asian purchased 3.5 lb. of his favorite mixture of dried fruits to use in a trail mix. The total cost was $16.87. How much did the fruit cost per pound?

2. Divide: $994.14 \div 18.9$.

1. Lisa purchased almonds for $3.50 per pound. She spent a total of $14.70. How many pounds of almonds did she purchase?

```
            4.2
350 ) 1470.0
     - 1400
        700
      - 700
          0
```

Lisa purchased 4.2 pounds of almonds.

2. Divide: $125.01 \div 5.4$. Then, check your answer for reasonableness.

```
            23.15
540 ) 12501.00
    - 1080
      1701
    - 1620
       810
     - 540
      2700
    - 2700
         0
```

The quotient of 125.01 and 5.4 is 23.15.

Estimate: $125 \div 5 = 25$

My estimate of 25 is near 23, which shows that my answer is reasonable.

1. Aslan purchased 3.5 lb. of his favorite mixture of dried fruits to use in a trail mix. The total cost was $16.87. How much does the fruit cost per pound?

$16.87 \div 3.5 \rightarrow 1,687$ hundredths $\div 350$ hundredths

```
            4.82
350 ) 1687.00
     -1400
      2870
    - 2800
       700
     - 700
         0
```

The dried fruit costs $4.82 per pound.

2.   **Divide:** $994.14 \div 18.9.$

$994.14 \div 18.9 \;\rightarrow\; 99,414$ *hundredths* $\div\; 1,890$ *hundredths*

```
            52.6
     ┌─────────────
1890 )   99414.0
       -9450
         4914
        - 3780
         11340
        - 11340
             0
```

$994.14 \div 18.9 = 52.6$