# *Fractions to Decimals (7NS 1.3 ):*

Terminating and Repeating Decimals

Name _____

Class _____ Date _____

Score _____

When converting fractions to decimals divide the **numerator** by the **denominator**

$\frac{4}{3}$

**Step 1:** Divide the *numerator* by the *denominator:*

$\frac{4}{3} \longrightarrow 4 \div 3 = 1.3333333....$

**Step 2:** Are there repeating numbers? If so, which ones?

$1.3333333.... \longrightarrow$ The **3** repeats

**Step 3:** Place a bar over the *repeating* number.

$1.3333333.... \longrightarrow 1.\overline{3}$

$\frac{1}{31}$

**Step 1:** Divide the *numerator* by the *denominator:*

$\frac{1}{31} \longrightarrow 1 \div 31 = 0.0322580645161...$

**Step 2:** Are there repeating numbers? If so, which ones?

$0.0322580645161... \longrightarrow$ There is **no** repeating pattern

**Step 3:** Since nothing repeats, round to the nearest thousandth.

$0.032\mathbf{2}580645161... \longrightarrow 0.032$

**1) What is the decimal equivalent of $\frac{1}{6}$?**

A. $0.1\overline{6}$
B. 0.2
C. 0.25
D. $0.\overline{33}$

**2) What is the decimal equivalent of $\frac{5}{6}$?**

A. $0.\overline{6}$
B. 0.75
C. $0.8\overline{3}$
D. 0.85

**3) What is the fractional equivalent of $.58\overline{3}$?**

A. $\frac{2}{3}$
B. $\frac{7}{12}$
C. $\frac{3}{5}$
D. $\frac{8}{17}$

**4) What is the fractional equivalent of $.\overline{8}$?**

A. $\frac{4}{5}$
B. $\frac{8}{11}$
C. $\frac{8}{9}$
D. $\frac{7}{8}$

**5) What is the fractional equivalent of $.\overline{27}$?**

A. $\frac{1}{4}$
B. $\frac{3}{11}$
C. $\frac{1}{3}$
D. $\frac{4}{11}$

**6) What is the decimal equivalent of $\frac{3}{14}$, rounded to the nearest thousandth?**

A. 0.214
B. 0.215
C. 0.286
D. 0.250

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**7) What is the decimal equivalent of $^{15}/_{29}$, rounded to the nearest thousandth?**

A. 0.510
B. 0.518
C. 0.520
D. 0.517

**8) What is the decimal equivalent of $^{57}/_{150}$, rounded to the nearest thousandth?**

A. 0.380
B. 0.375
C. 0.400
D. 0.035

**9) Which of the following fractions is the approximate equivalent to 0.571?**

A. $^{7}/_{11}$
B. $^{3}/_{7}$
C. $^{4}/_{7}$
D. $^{5}/_{11}$

**10) Which of the following fractions is the approximate equivalent to 0.294?**

A. $^{3}/_{10}$
B. $^{1}/_{3}$
C. $^{5}/_{17}$
D. $^{6}/_{19}$

**11) What is 0.9874621343 rounded to the nearest thousandth?**

A. 1.000
B. 0.990
C. 0.980
D. 0.987

**12) What is 21.3493874563 rounded to the nearest thousandth?**

A. 21.340
B. 21.350
C. 21.000
D. 21.300

**13) If $^{1}/_{b} = 0.08\overline{3}$, then $b$ =**

A. 11
B. 12
C. 9
D. 7

**14) If $^{10}/_{c} = 0.\overline{6}$, then $c$ =**

A. $16.\overline{6}$
B. 16
C. 12
D. 15