Converting Fractions to Decimals Worksheet

Grade 7 · Common Core 7.NS.A.2d

> Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.

Practice

Builds the skill step by step.

1. Write $\frac{3}{4}$ as a decimal.

2. Write $\frac{2}{5}$ as a decimal.

3. Write $\frac{1}{8}$ as a decimal.

4. Which fraction has a decimal that repeats?

   A. $\frac{1}{4}$

   B. $\frac{1}{5}$

   C. $\frac{1}{3}$

   D. $\frac{1}{8}$

5. Write $\frac{7}{10}$ as a decimal.

6. Write $\frac{1}{3}$ as a decimal, writing the repeating part six times.

7. Write $\frac{9}{20}$ as a decimal.

8. Does the decimal for $\frac{5}{16}$ terminate or repeat?

   A. Repeat

   B. Terminate

   C. Neither

   D. Both

9. Write $-\frac{3}{5}$ as a decimal.

10. Write $\frac{2}{3}$ as a decimal, writing six digits after the point.

ALBERT

Name _____ Date _____

Converting Fractions to Decimals Worksheet

Grade 7 · Common Core 7.NS.A.2d

On Level

Grade-level practice.

1. Write $\frac{5}{6}$ as a decimal, writing six digits after the point.

2. Write $\frac{3}{11}$ as a decimal, writing six digits after the point.

3. Write $\frac{7}{8}$ as a decimal.

4. Which is the decimal form of $\frac{4}{9}$?

   A. 0.49

   B. 0.4

   C. 0.444..., with the 4 repeating

   D. 0.0444...

5. Write $2\frac{3}{8}$ as a decimal.

6. Write $-\frac{7}{12}$ as a decimal, writing six digits after the point.

7. Order from least to greatest: $\frac{5}{8}$, 0.6, $\frac{2}{3}$

8. Which fraction has a terminating decimal?

   A. $\frac{1}{6}$

   B. $\frac{2}{9}$

   C. $\frac{7}{40}$

   D. $\frac{5}{7}$

9. Write $\frac{1}{7}$ as a decimal, writing six digits after the point.

10. Write $\frac{13}{4}$ as a decimal.

Converting Fractions to Decimals Worksheet

Grade 7 · Common Core 7.NS.A.2d

Challenge

Multi-step and word problems that stretch it.

1. Write $\frac{5}{12}$ as a decimal, writing six digits after the point.

2. A runner finished $\frac{7}{8}$ of a race. Write this as a decimal and a percent.

3. Which is greater, $\frac{3}{7}$ or 0.43? By how much, to the nearest thousandth?

4. In simplest form, a fraction's denominator has only 2s and 5s as prime factors. Its decimal…

   A. repeats

   B. is irrational

   C. terminates

   D. is a whole number

5. Write $\frac{11}{6}$ as a decimal, writing six digits after the point.

6. Nina says $\frac{1}{6} = 0.16$. What mistake did she make, and what is the correct decimal (six digits after the point)?

7. A recipe uses $\frac{3}{8}$ cup of oil. A measuring cup is marked in tenths. Between which two tenths marks is $\frac{3}{8}$ cup?

8. Write $\frac{4}{15}$ as a decimal, writing six digits after the point.

9. Order from greatest to least: $-\frac{1}{3}$, -0.3, $-\frac{3}{8}$

10. A batting average is hits ÷ at-bats, written to three decimal places. A player has 17 hits in 60 at-bats. What is her average?