

Algebra I
4.4 Worksheet #1
Reciprocals

Name: _____

Date: _____ Hour: _____

- Two numbers are **reciprocals** if their _____ is 1.
- Are these numbers reciprocals? Answer YES or NO.
 - 10 and 1.1 _____
 - 0.5 and 2 _____
 - 2 and $-\frac{1}{2}$ _____
 - 10 and -0.1 _____
 - $\frac{3}{7}$ and $\frac{7}{3}$ _____
 - $\frac{1}{8}$ and $8/-1$ _____
 - $-\frac{2}{3}$ and -1.5 _____
 - $-\frac{5}{7}$ and $\frac{7}{5}$ _____
 - $\frac{1}{9}$ and 9 _____
- How do you find the reciprocal of a fraction? _____
- Write the **reciprocal** of each fraction then verify that the two fractions are reciprocals.

$$\frac{3}{2} \quad \frac{7}{9} \quad \frac{9}{11} \quad \frac{13}{8}$$
$$\underline{\quad} \cdot \underline{\quad} = \underline{\quad} \quad \underline{\quad} \cdot \underline{\quad} = \underline{\quad} \quad \underline{\quad} \cdot \underline{\quad} = \underline{\quad} \quad \underline{\quad} \cdot \underline{\quad} = \underline{\quad}$$

$$\frac{1}{12} \quad -\frac{1}{5} \quad -\frac{2}{9}$$
$$\underline{\quad} = \underline{\quad} \quad \underline{\quad} = \underline{\quad} \quad \underline{\quad} = \underline{\quad}$$
$$\underline{\quad} \cdot \underline{\quad} = \underline{\quad} \quad \underline{\quad} \cdot \underline{\quad} = \underline{\quad} \quad \underline{\quad} \cdot \underline{\quad} = \underline{\quad}$$

- Write each rational number as a **fraction**, then **write the reciprocal**, then **verify**.

<u>Rational Number</u>	<u>Fraction</u>	<u>Reciprocal</u>	<u>Verification</u>
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a. 4.3

b. 0.7

c. $3\frac{1}{6}$

