Algebra I

2-9

Dividing Real Numbers

How do we multiply fractions?

$$\frac{2}{3} \cdot \frac{4}{5} = \frac{8}{15}$$

Multiply the tops,
Multiply the bottoms

There is no such thing as CROSS PRODUCTS.

How do we divide fractions?

$$\frac{2}{3} \div \frac{4}{5} =$$

→ Multiply the reciprocal.

$$\frac{1}{3}\left(\frac{5}{2}\right) = \frac{5}{6}$$

Sample Questions

Simplify.

1) $\dfrac{8}{\frac{2}{3}}$ Rewrite

$= 8 \div \dfrac{2}{3}$

$= \dfrac{8}{1} \cdot \dfrac{3}{2}$

$= 12$

2) $(-6) \cdot \dfrac{-5x}{2} = 15x$

3) $(-88) \div \left(-\frac{1}{11}\right)$

$-88 \cdot \dfrac{-11}{1}$

968

↳ average

Find the mean of the given numbers.

4) -5, -2, 8, -7

$$\frac{-5+(-2)+8+(-7)}{4}$$

Because there are four numbers in our collection.

$$\frac{-7+1}{4}$$

$$-\frac{6}{4} \div -\frac{3}{2}$$

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1-33 all