

DIVISION WITH FRACTIONS

↳ example 1:

$$\frac{8}{\frac{1}{2}} = 8 \div \frac{1}{2}$$

consider the number line:



$8 \div \frac{1}{2}$ asks "How many halves in 8 wholes?"

$8 \div \frac{1}{2} = 16$, since there are 16 halves in 8 wholes.

ANOTHER APPROACH:

$$8 \div \frac{1}{2} = 8 \cdot \frac{2}{1} = \frac{16}{1} = 16$$

↳ example 2:

a) $\frac{3}{4} \div 2$

b) $(-4) \div \frac{8}{5}$

↳ example 3:

$$a) \frac{40}{69} \div \frac{25}{46}$$

$$b) \frac{xy^2}{z} \div \frac{y}{z}$$

↳ example 4:

$$a) 12 \div \left(\frac{1}{2}\right)^2$$

$$b) \frac{3}{5} \div \frac{1}{10} + 8$$

↳ example 5:

a) what is the quotient of
 $\frac{2}{9}$ and $\frac{4}{9}$?

b) If the quotient of $\frac{4}{5}$ and $\frac{1}{10}$
is increased by 5,
what value results?

DIVISION WITH FRACTIONS practice problems

1. $4 \div \frac{1}{2}$

2. $\frac{10}{\frac{1}{5}}$

3. $\frac{16}{27} \div \frac{20}{36}$

4. $\frac{a^2bc^3}{12} \div \frac{abc}{3}$

5. $\left(\frac{1}{3}\right)^2 \div \frac{5}{9}$

6. what is the quotient of $\frac{8}{9}$ and $\frac{2}{3}$?