Steps for Dividing Fraction

1) Use reciprocal and change to multiplication.

2) Multiply numerators, multiply denominators.

3) Reduce

Keep   Change   Flip

Reciprocal

Reciprocal: The multiplicative inverse of a number. (what you multiply a fraction by to get 1).

(ex) $\frac{2}{3} * \boxed{\frac{3}{2}} = 1$

Find the reciprocal:

1) $\frac{2}{9}$

$\frac{2}{9} * \boxed{\frac{9}{2}} = 1$

2) 8

$\frac{8}{1} * \boxed{\frac{1}{8}} = 1$

3) $\frac{1}{6}$

$\frac{1}{6} * \boxed{\frac{6}{1}} = 1$

4) 0.1

$\frac{1}{10} * \boxed{\frac{10}{1}} = 1$

Dividing Fractions

1) $-\dfrac{2}{5} \div \dfrac{4}{7}$

$-\dfrac{2}{5} * \dfrac{7}{4_2} = \boxed{\dfrac{-7}{10}}$

2) $\dfrac{2}{15} \div \left(-\dfrac{8}{25}\right)$

$\dfrac{2}{15} * -\dfrac{25^5}{8_4} = \boxed{\dfrac{-5}{12}}$

3) $-\dfrac{16}{21} \div \dfrac{18}{1}$

$-\dfrac{16^8}{21} * \dfrac{1}{18_9} = \boxed{\dfrac{-8}{189}}$

4) $\dfrac{27}{1} \div \dfrac{3}{11}$

$\dfrac{27^9}{1} * \dfrac{11}{3_1} = \dfrac{99}{1} = \boxed{99}$

5) $\dfrac{3}{8} \div 9\dfrac{1}{6}$

$\dfrac{3}{8} \div \dfrac{55}{6}$

$\dfrac{3}{8_4} * \dfrac{6^3}{55} = \boxed{\dfrac{9}{220}}$

6) $4\dfrac{2}{3} \div 3\dfrac{4}{5}$

$\dfrac{14}{3} \div \dfrac{19}{5}$

$\dfrac{14}{3} * \dfrac{5}{19} = \dfrac{70}{57} = \boxed{1\dfrac{13}{57}}$

7) $-\dfrac{4}{9n} \div \dfrac{1}{15n}$

$-\dfrac{4}{9n_3} * \dfrac{15n^5}{1} = -\dfrac{20}{3} = \boxed{-6\dfrac{2}{3}}$

8) $-\dfrac{15}{18} \div \dfrac{25n}{1}$

$-\dfrac{15^3}{18} * \dfrac{1}{25n_5} = \dfrac{-3}{90n} = \boxed{\dfrac{-1}{30n}}$

Adapted: #1-10 on Why Was the Unemployed Dolphin Trainer So Sad? wkst.