

To divide by a fraction you need:

- All fractions
- Flip the fraction by which you are dividing  
(Take the reciprocal of the divisor.)
- Change division to **multiplication**, and now you can:
- Reduce if possible
- Multiply straight across

$$1) \quad \frac{7}{12} \div \frac{28}{30}$$

$$\overset{1}{\cancel{7}} \overset{5}{\cancel{30}} \cdot \frac{\cancel{28}^4}{\cancel{12}_2} = \left( \frac{5}{8} \right)$$

$$3) \quad \frac{7}{16} \div 4\frac{3}{8}$$

$$\frac{7}{16} \div \frac{35}{8}$$

$$\overset{1}{\cancel{7}} \overset{1}{\cancel{35}} \cdot \frac{\cancel{8}_2}{\cancel{16}_4} = \left( \frac{1}{10} \right)$$

$$2) \quad \frac{8}{9} \div \frac{20}{1}$$

$$\overset{2}{\cancel{8}} \cdot \frac{1}{\cancel{20}_5} = \left( \frac{2}{45} \right)$$

$$4) \quad 6\frac{3}{4} \div \frac{3}{8}$$

$$\overset{9}{\cancel{27}} \cdot \frac{\cancel{8}_2}{\cancel{3}_1} = \frac{18}{1} = \left( 18 \right)$$

$$5) \frac{18}{1} \div \frac{3}{10}$$

$$6 \cancel{18} \cdot \frac{10}{\cancel{3}1} = \frac{60}{1} = \boxed{60}$$

$$6) \frac{4}{7} \cdot \frac{3}{20} \div \frac{10}{21}$$

$$\cancel{1}4 \cdot \frac{3}{\cancel{2}0_5} \cdot \frac{\cancel{2}1^3}{10} = \boxed{\frac{9}{50}}$$

$$8) \frac{4}{7} \left( \frac{3}{20} \div \frac{10}{21} \right)$$

$$\frac{3}{20} \cdot \frac{21}{10}$$

$$\cancel{1}4 \cdot \frac{\cancel{6}3^9}{\cancel{2}0_50} = \boxed{\frac{9}{50}}$$

$$7) \frac{3}{5} \div \frac{3}{20} \cdot \frac{1}{6}$$

$$\cancel{1}3 \cdot \frac{\cancel{4}^2 \cancel{2}0}{\cancel{1}3} \cdot \frac{1}{\cancel{6}3} = \boxed{\frac{2}{3}}$$

$$9) \frac{1}{30} \div \left( \frac{\cancel{1}3 \cancel{4}}{\cancel{2}0_5 \cancel{3}9} \right)$$

$$\frac{1}{30} \div \frac{1}{15}$$

$$\frac{1}{\cancel{3}0_2} \cdot \frac{\cancel{1}5}{1} = \boxed{\frac{1}{2}}$$