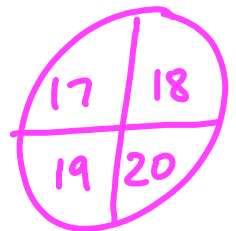
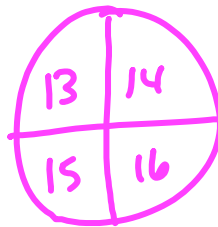
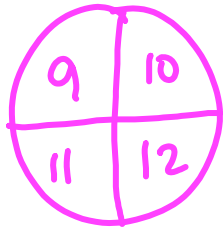
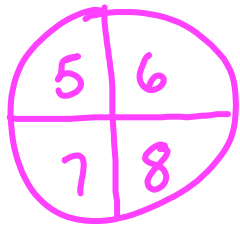
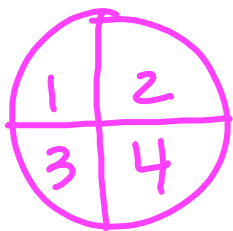


7-5 Divide Fractions

$$5 \div \frac{1}{4} = 20$$



Reciprocal -

any 2 #'s whose product = 1

Find the reciprocal.

1) $\frac{3}{4}$ is $\frac{4}{3}$

2) $\frac{7}{9}$ is $\frac{9}{7}$

3) $15 = \frac{15}{1}$ is $\frac{1}{15}$

To find for frac \rightarrow FLIP

Think: $\frac{3}{4} \cdot \frac{4}{3} = 1$

$\frac{7}{9} \cdot \frac{9}{7} = 1$

4) $2\frac{3}{4} = \frac{11}{4}$ is $\frac{4}{11}$

Why "shortcut" works:

$$\frac{\frac{2}{3}}{\frac{1}{8} \div \frac{1}{7}} = \left(\frac{\frac{2}{3}}{\frac{1}{8} \div \frac{1}{7}} \right) = \frac{\frac{2}{3} \cdot \frac{7}{5}}{1} = \frac{2}{3} \cdot \frac{7}{5}$$

$\frac{1}{8} \div \frac{1}{7}$

BIG SECRET
* DON'T DIVIDE

1st Keep 1st #

Change \div to \cdot

Flip 2nd frac

2nd mult. & simplify/rename

$$5 \div \frac{1}{4}$$

$$\frac{5}{1} \cdot \frac{4}{1} = \frac{20}{1} = \boxed{20}$$

Ex

$$1) \frac{5}{5} \div \frac{3}{4}$$

$$2) \frac{5}{\cancel{5}} \cdot \frac{4}{3} = \boxed{\frac{5}{6}}$$

Keep Change Flip

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

$$\frac{3}{4} \cdot \frac{5}{2} = m$$

$$\boxed{\frac{15}{8} = m}$$

$$3) \frac{3}{4} \div 6 \rightarrow \text{Think } 6 = \frac{6}{1}$$

$$\frac{\cancel{3}}{4} \cdot \frac{1}{\cancel{6}_2} = \boxed{\frac{1}{8}}$$

$$4) \frac{7}{9} \div \frac{1}{3}$$

$$\frac{7}{\cancel{9}_{3}} \cdot \frac{\cancel{3}^1}{1} = \boxed{\frac{7}{3}}$$