8.2 Properties of Muttiplication

Inverse Property of Multiplication

- the product of two reciprocals,

or multiplicative inverse, is I

Reciprocals - 1/2 to 2/1

or (13/4) to 4/7



How to use the Properties

Commutative Property - to reorder

Associative Property - to regroup

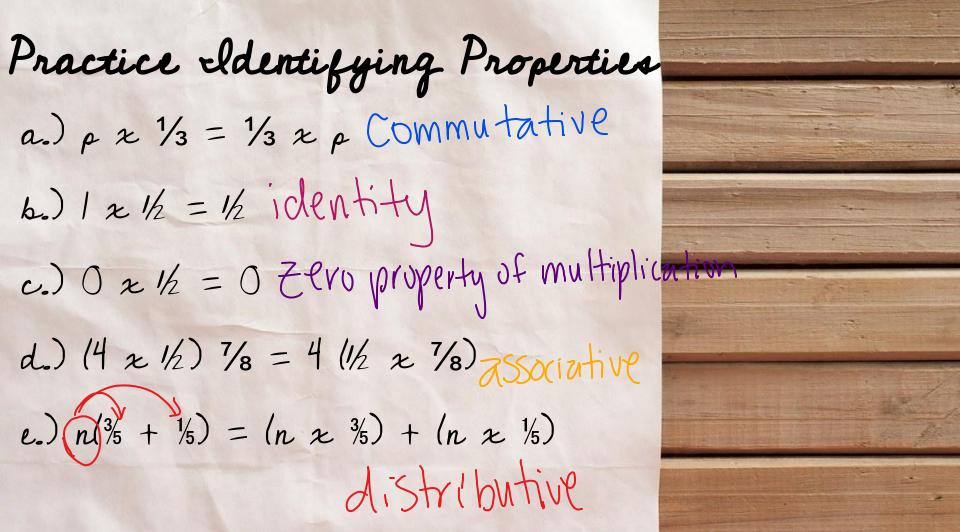
Distributive Property—to rewrite the product of a number as a sum or difference

$$\frac{2}{3} \times \frac{3}{5} = \frac{3}{5} \times \frac{2}{3}$$

$$\frac{1}{3}(3/7 + 2/7) =$$
 $\frac{1}{3} \times 3/7 + \frac{1}{3} \times \frac{2}{7}$

Two other Properties:

- 1. Zero Property of Multiplication $\frac{1}{2} \times 0 = 0$
- 2. Identity Property $\frac{1}{3} \times 1 = \frac{1}{3}$



2. 34 20? = 34 identity

Can you identify the properties as we go?

Find the Missing Pieces

3. Px 1/2 = 0

Zero proper Zero property of multiplication

4. 2/7 (% × %) = (2/7 × ?) 1/6

associative 13/5

Can you identify the properties as we go?