

## 7-2 + 7-3 Multiplying Fractions + Mixed #s

• To mult. frac.  $\frac{\text{numer.} \times \text{numer.}}{\text{den.} \times \text{den.}}$   
Simplify/rename

- Shortcut:
- 1) look diagonally across + find GCF of 2 #s
  - 2)  $\div$  both #s by GCF
  - 3) mult. normally

$$\text{ex 1)} \quad \frac{1}{4} \cdot \frac{2}{3} = \boxed{\frac{1}{6}}$$

$$2) \quad \frac{3}{10} \times \frac{4}{9} = n$$

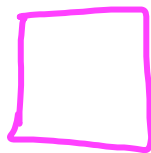
$$\boxed{\frac{2}{15} = n}$$

$$3) \quad 18 \times \frac{2}{9}$$

whole #s go over 1

$$\frac{18}{1} \cdot \frac{2}{9} = \frac{4}{1} = \boxed{4}$$

4) Find the perimeter.



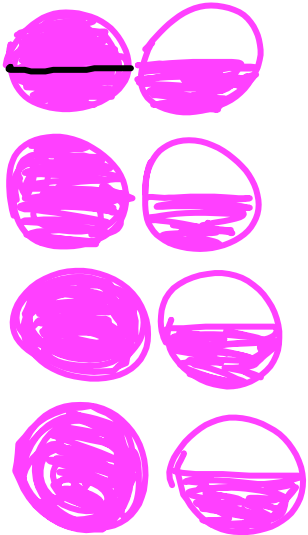
$\frac{3}{8}$  yd.

$$\frac{3}{8} \cdot 4$$

$$\frac{3}{8} \cdot \frac{4}{1} = \frac{3}{2} = \boxed{1\frac{1}{2} \text{ yd}}$$

## Mixed #s

$$1\frac{1}{2} \cdot 4 = 6$$



\* must make mixed #s into improper frac.

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

Ex 1)  $\frac{2}{5} \times 3\frac{1}{6} = m$

$$1 \frac{2}{5} \cdot \frac{19}{6} = m$$

$$\boxed{\frac{19}{15} = m}$$

2)  $6\frac{6}{11} \cdot \frac{4}{9}$

$$8\frac{72}{11} \cdot \frac{4}{9} = \boxed{\frac{32}{11}}$$

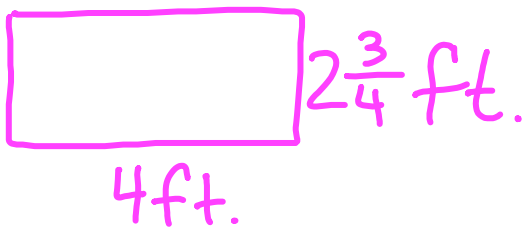
3) Find the value of  $cd$  if  $c = 3\frac{1}{2}$  and  $d = 4\frac{2}{5}$ .

$$3\frac{1}{2} \cdot 4\frac{2}{5}$$

$$1\frac{7}{2} \cdot \frac{22}{5} = \boxed{\frac{77}{5}}$$

\* a variable beside a variable means mult.

4) Find the area.



$$A = l \times w$$

$$A = 2\frac{3}{4} \times 4$$

$$A = \frac{11}{4} \times \frac{4}{1}$$

$$A = 11 \text{ ft}^2$$