T-MF Math Fundamentals Week 16 1/10

1.) $2\frac{5}{8} \div 1\frac{3}{4}$

$2\frac{5}{8} \rightarrow \frac{(8*2)+5}{8} \quad \frac{16+5}{8} = \frac{21}{8}$

$1\frac{3}{4} \rightarrow \frac{(4*1)+3}{4} \quad \frac{4+3}{4} = \frac{7}{4}$

$2\frac{5}{8} \div 1\frac{3}{4}$

$\frac{21}{8} \div \frac{7}{4}$

$\frac{21}{8} * \frac{4}{7}$ (÷7 ↓ ÷7)

$\frac{3}{8} * \frac{4}{1}$ (÷4)

$\frac{3}{2} * \frac{1}{1} = \boxed{\frac{3}{2}}$

2.) $4\frac{1}{2} \div \frac{18}{10}$

$4\frac{1}{2} \rightarrow \frac{(2*4)+1}{2} = \frac{8+1}{2} = \frac{9}{2}$

$4\frac{1}{2} \div \frac{18}{10}$

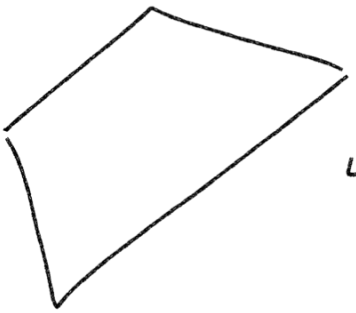
$\frac{9}{2} \div \frac{18}{10}$

$\frac{9}{2} * \frac{10}{18}$ (÷9 ↓ ÷9)

$\frac{1}{2} * \frac{10}{2}$ (÷2 ↓ ÷2)

$\frac{1}{1} * \frac{5}{2} = \boxed{\frac{5}{2}}$

parallel lines never touch



4 sided object

Quadrilateral

Parallel sides

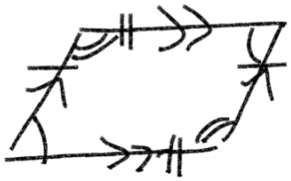
No Parallel lines

2 pairs of parallel sides

1 parallel side

adjacent equal sides

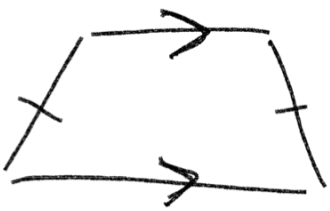
kite



parallelogram

opposite sides equal

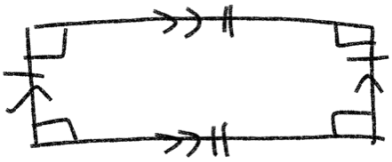
opposite angles equal



trapezoid

All angles equal

All sides equal

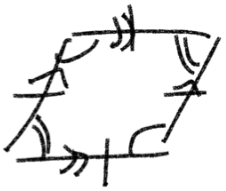


Rectangle

opposite sides parallel

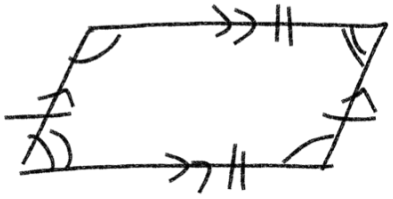
All angles equal

All sides equal



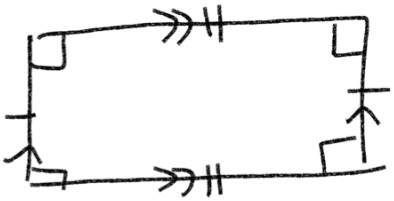
Rhombus

square



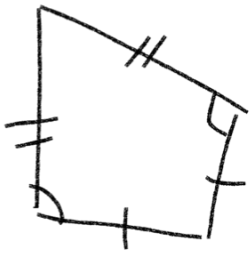
Name: Parallelogram
- Quadrilaterals

1.)



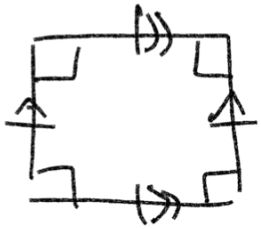
Name: Rectangle
quadrilateral
parallelogram

2.)



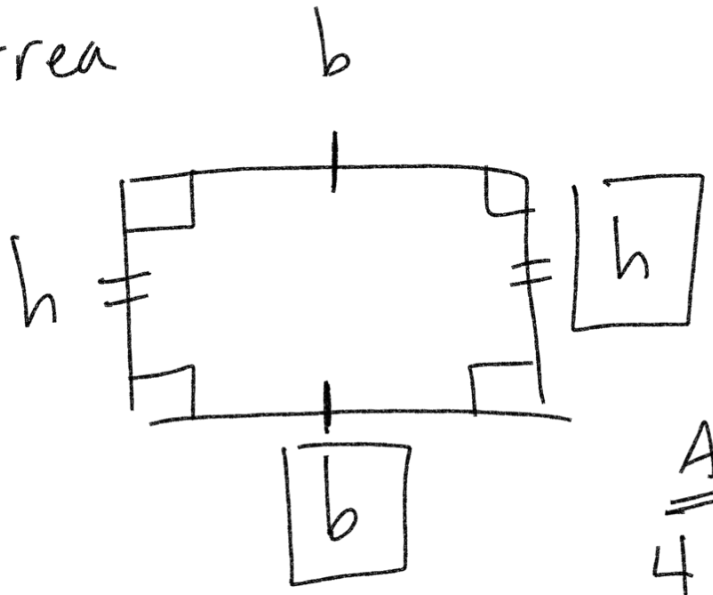
Name: kite
quadrilateral

3.)



Name: Square
quadrilateral
parallelogram
rectangle → all angles equal
rhombus → all sides equal

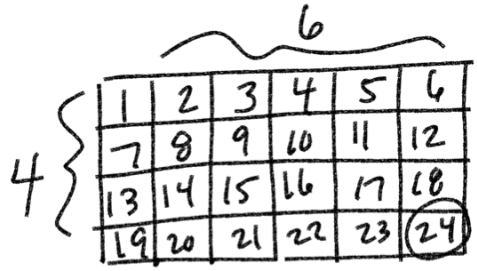
Area



Area = base * height

Area =

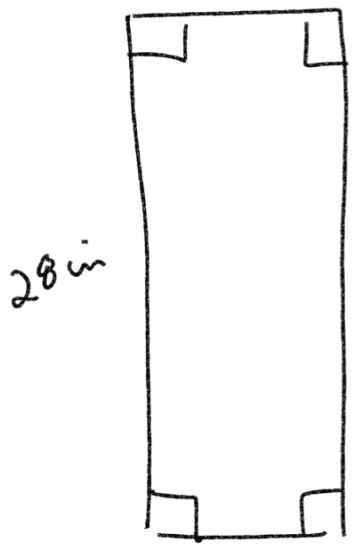
$4 * 6 = 24$ square units



24 units^2

4in * 6in = 24 in^2

1.)



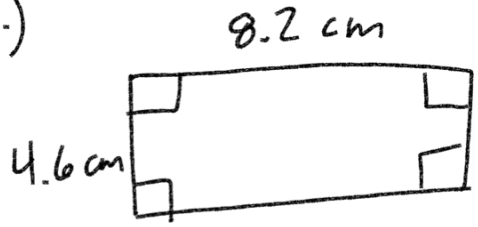
Area = 12in * 28in

336 in^2

in * in = in^2

$4 * 4 = (4)^2$

2.)



Area = 4.6 cm * 8.2 cm

37.72 cm^2

$$\begin{array}{r} 8.2 \\ \times\ 4.6 \\ \hline 492 \\ +3280 \\ \hline 37.72 \end{array}$$

37.72 cm^2

Area: $5\frac{1}{2}$ units * $3\frac{2}{3}$ units

Must convert to improper fractions

$5\frac{1}{2} \rightarrow \frac{(2*5)+1}{2} = \frac{10+1}{2} = \frac{11}{2}$

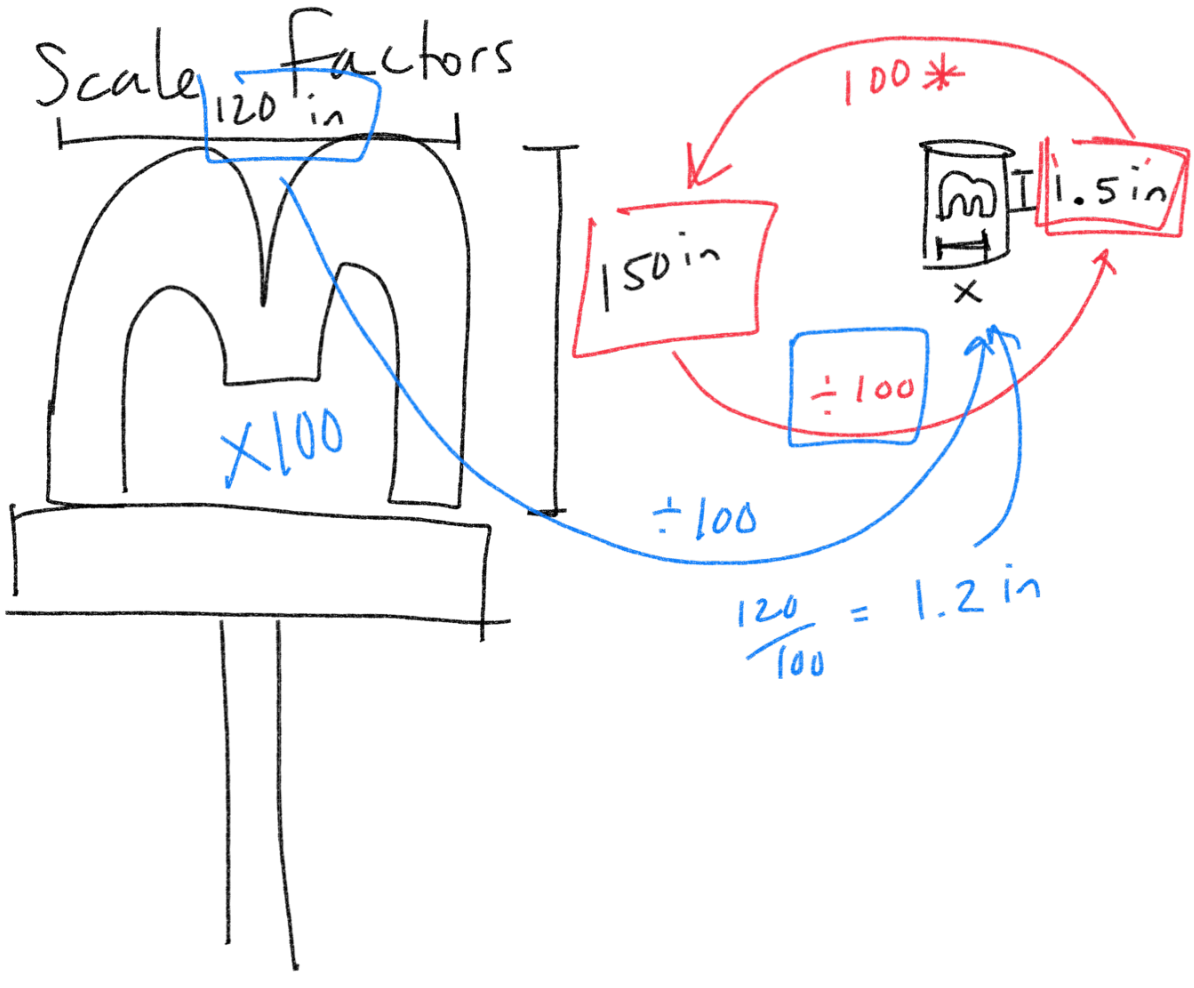
$3\frac{2}{3} \rightarrow \frac{(3*3)+2}{3} = \frac{9+2}{3} = \frac{11}{3}$

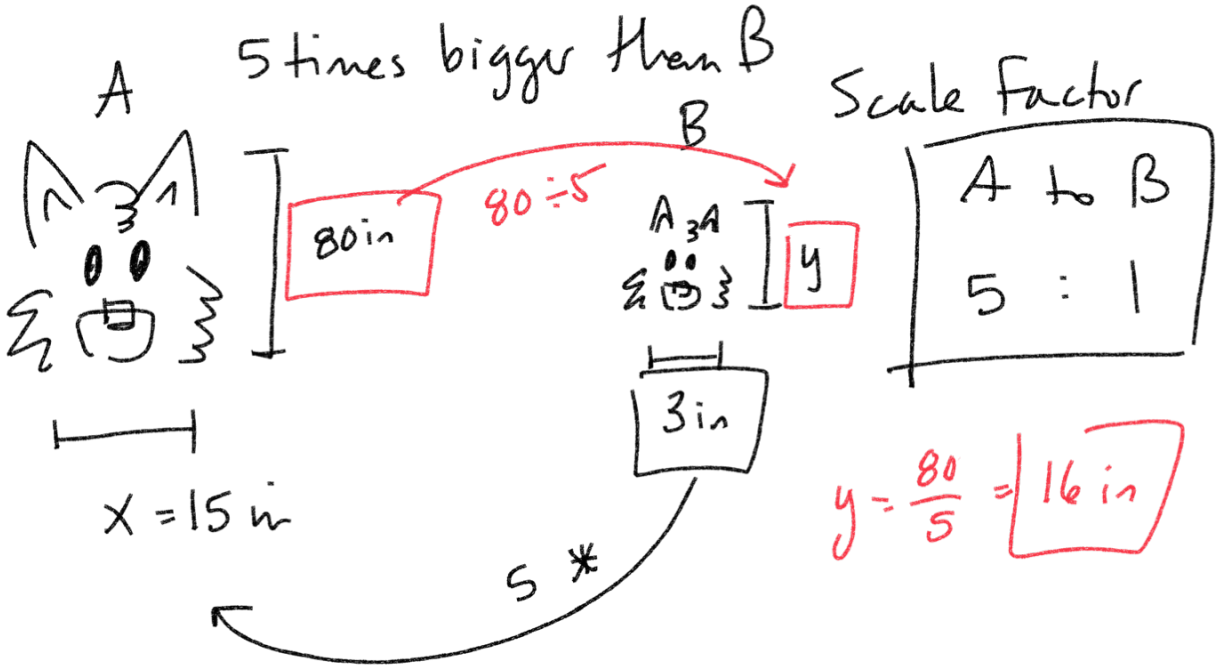
$\frac{11}{2}$ units * $\frac{11}{3}$ units

$\frac{121}{6}$ units^2

$20\frac{1}{6}$ units^2

Scale factors





Scale Factor

A to B
5 : 1

$y = \frac{80}{5} = 16$ in