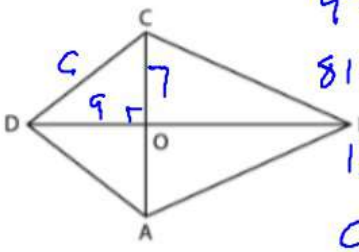
A) Find the indicated side length in each kite. Round your answer to the nearest tenth.

1)



$9^2+7^2=c^2$

$81+49=c^2$

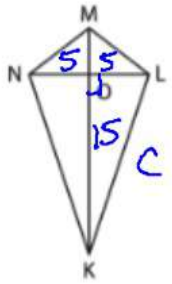
$130=c^2$

$c=\sqrt{130}$

OC = 7 in ; OD = 9 in

CD = 11.4

2)



$5^2+15^2=c^2$

$25+225=c^2$

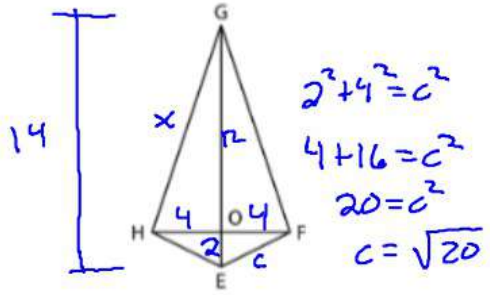
$250=c^2$

ON = 5 ft ; OK = 15 ft

KL = 15.8

B) Find the indicated side lengths in each kite. Round your answer to the nearest tenth.

5)



$2^2+4^2=c^2$

$4+16=c^2$

$20=c^2$

$c=\sqrt{20}$

OE = 2 ft ; OF = 4 ft ; EG = 14 ft

EF = 4.5 ; GH = 12.6

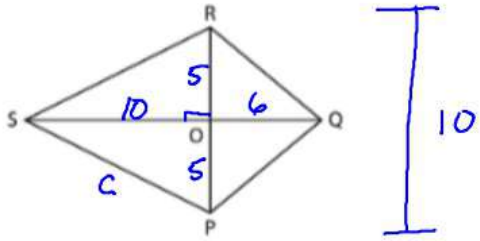
$12^2+4^2=x^2$

$144+16=x^2$

$160=x^2$

$x=\sqrt{160}$

6)



RP = 10 yd ; OQ = 6 yd ; OS = 10 yd

RQ = 7.8 ; PS = 11.2

$5^2+c^2=(RQ)^2$

$25+36=(RQ)^2$

$61=(RQ)^2$

$RQ=\sqrt{61}$

$10^2+5^2=c^2$

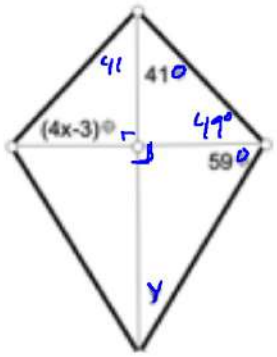
$100+25=c^2$

$125=c^2$

$c=\sqrt{125}$

9. Kite

x = 13, y = 31



$90+y+59=180$

$y=31$

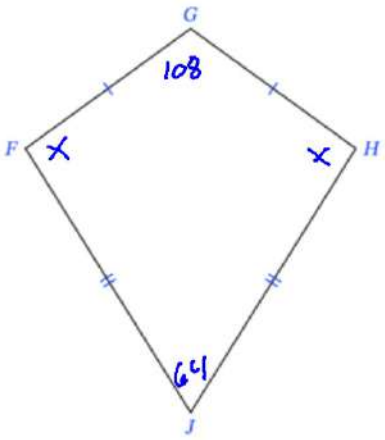
$4x-3=49$

$\frac{4x}{4}=\frac{52}{4}$

$x=13$

$4x+3+41+90=180$

Given that $FGHJ$ is a kite, where $m\angle FGH = 108°$ and $m\angle FJH = 64°$, find $m\angle GFJ$.



$x+x+64+108=360$

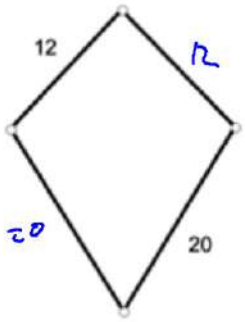
$2x+172=360$

$2x=188$

$x=94°$

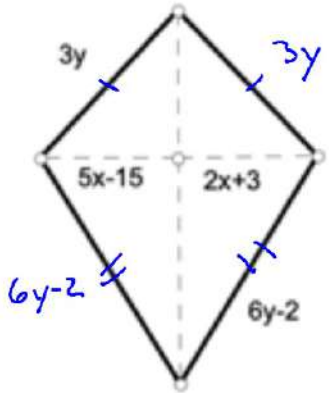
1. Kite

Perimeter = 64



$12+12+20+20=P$

4. Kite's Perimeter=86



Find x and y

$5x-15=2x+3$

$3x=18$

$x=6$

$3y+3y+6y-2+6y-2=86$

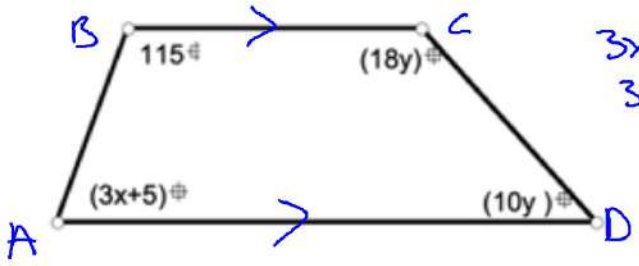
$18y-4=86$

$18y=90$

$y=5$

8. Trapezoid

x = _____, y = _____



$3x+5+115=180$

$3x+120=180$

$3x=60$

$x=20$

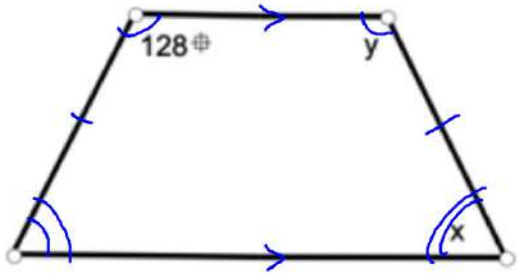
$18y+10y=180$

$28y=180$

$y=6.4$

3. Isosceles Trapezoid

x = 52, y = 128°



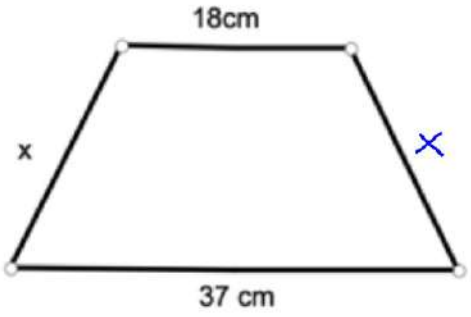
$128+128+x+x=360$

$X+128=180$

$X=52$

6. Isosceles Trapezoid's Perimeter=85 cm

x = _____



$x+x+18+37=85$

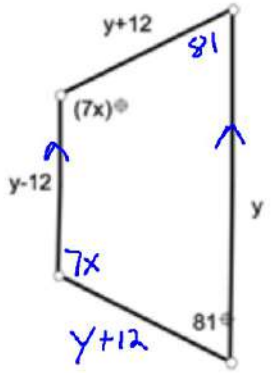
$2x+55=85$

$2x=30$

$x=15$ cm

5. Isosceles Trapezoid's Perimeter=164 cm

x = _____, y = _____



$y+12+y-12+y+12+y=164$

$4y+12=164$

$4y=152$

$y=38$

$7x+81=180$

$7x=99$

$x=14.14$