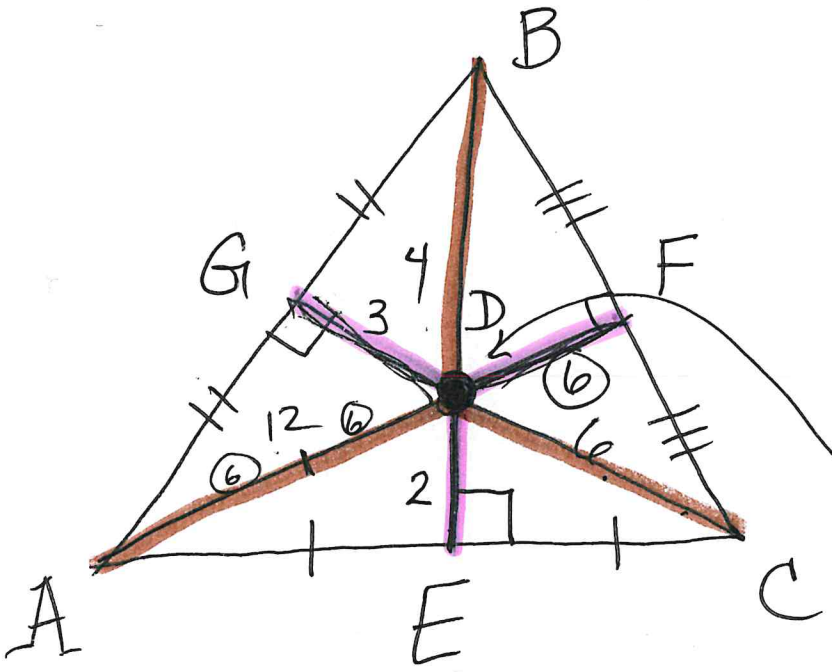
10/29

Lesson 29/30 Special Lines in Δ's



Perpendicular bisector

Point of concurrency

Circumcenter

$\overline{DE} = 2$

then $\overline{BD} = 4$

$\overline{DF} = 6$

$\overline{AD} = 12$

~~B~~ $\overline{DC} = 6$

$\overline{DG} = 3$

90°

* Short ~~pat side~~ is 1/2 of long ~~side~~ pat

$a^2 + b^2 = c^2$

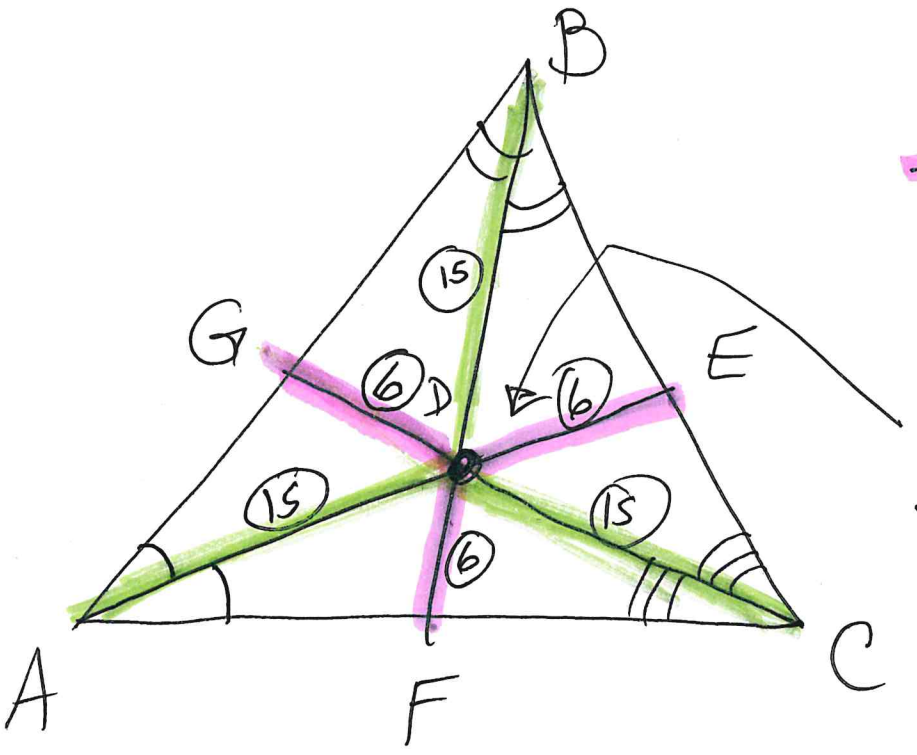
$3^2 + b^2 = 12^2$

$9 + b^2 = 144$

$-9 \quad -9$

$\sqrt{b^2} = \sqrt{135}$

$b =$



Angle Bisector

(cut two ≅ parts)

point of concurrency

Incenter

$\overline{GD} \cong \overline{DE} \cong \overline{DF}$

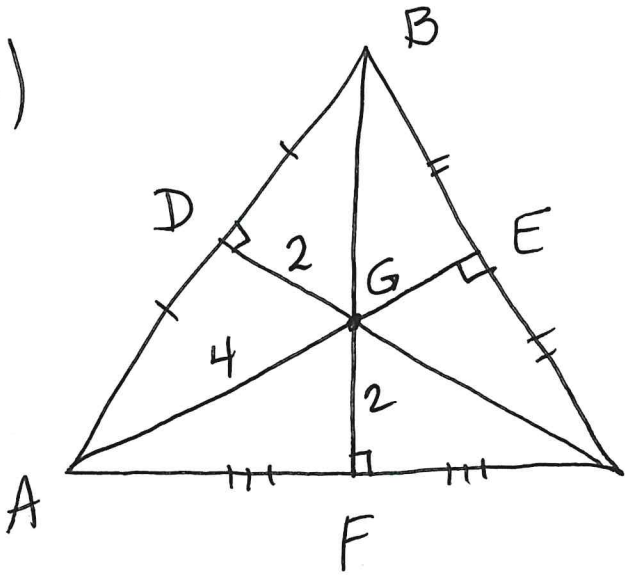
$(6 \cong 6 \cong 6)$

$\overline{BD} \cong \overline{AD} \cong \overline{DE}$

$(15 \cong 15 \cong 15)$

Lesson 29/30: HWK: pg. 173 #1, 2

1.)



Given ▷ $\overline{DG} = 2$

$\overline{AG} = 4$

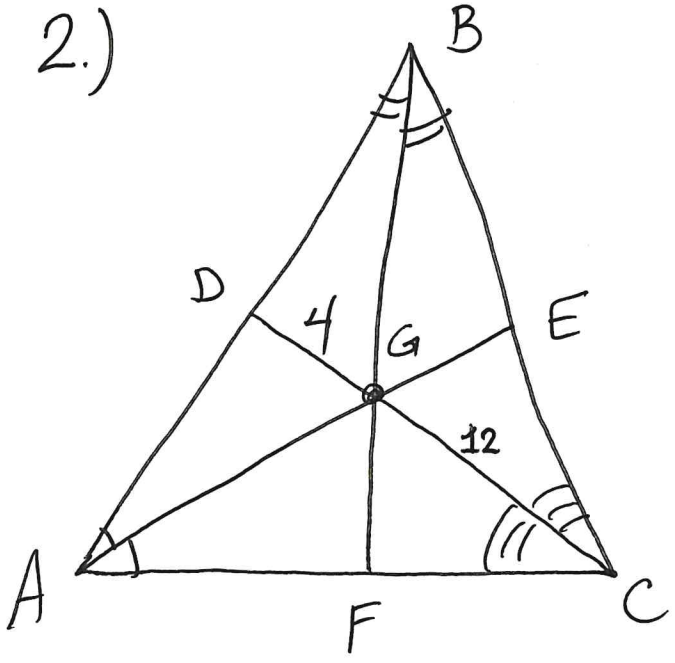
$\overline{FG} = 2$

Find ▷ $\overline{BG} =$ _____

$\overline{GE} =$ _____

$\overline{GC} =$ _____

2.)



Given ▷ $\overline{DG} = 4$

Find ▷ $\overline{GC} = 12$

$\overline{FG} =$ _____

$\overline{GE} =$ _____

$\overline{BG} =$ _____

$\overline{AG} =$ _____

Happy Halloween!