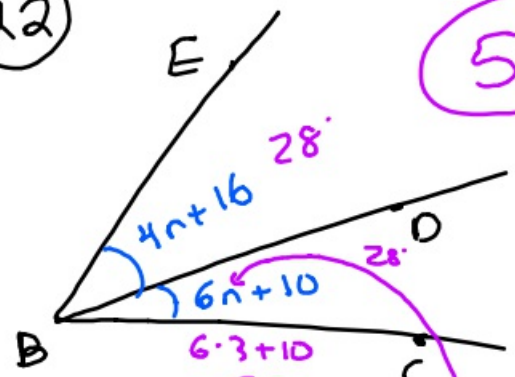
Ch.1 PT1 8-30-19 6th Geo

(22)



56°

$6n+10 = 4n+16$

$-4n \quad -4n$

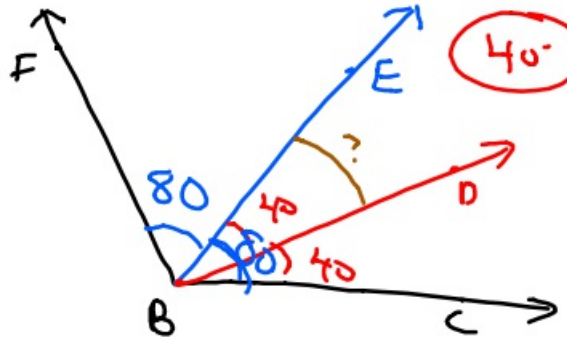
$2n+10 = 16$

$-10 \quad -10$

$2n = 6$

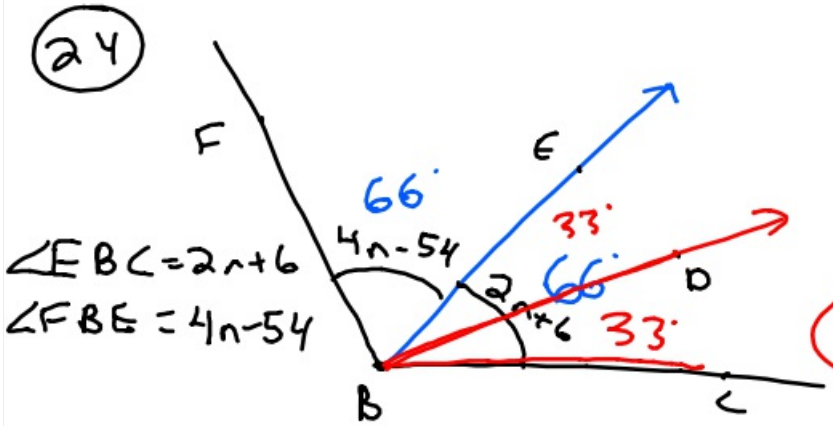
$n = 3$

(23)



40°

(24)



$\angle EBC = 2n+6$

$\angle FBE = 4n-54$

33°

$4n-54 = 2n+6$

$-2n \quad -2n$

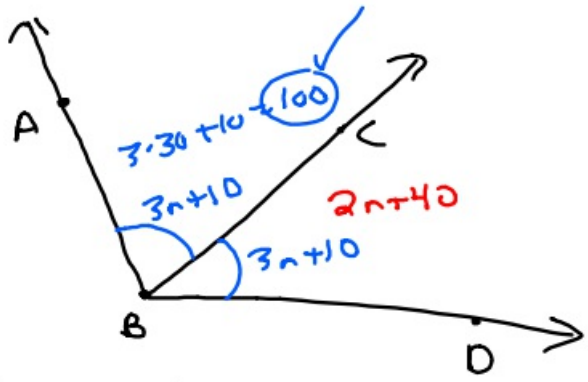
$2n-54 = 6$

$+54 \quad +54$

$2n = 60$

$n = 30$

New practice



$\overrightarrow{BC}$ bisects $\angle ABD$.

$\angle ABD = 6n+20$ and $\angle CBD = 2n+40$

Find $\angle ABC$'s numerical value.

$2n+40 = 3n+10$

$n = 30$

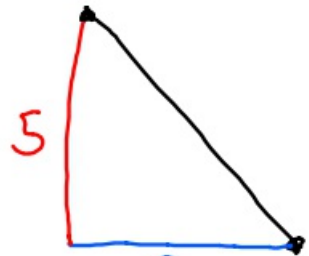
② $A = (-3, -5)$ $B = (-1, -10)$.

Find AB.

$(-3, -5)$

$(-1, -10)$

2 5



$leg^2 + leg^2 = hyp^2$

$2^2 + 5^2 = hyp^2$

$\sqrt{29} = \sqrt{hyp^2}$

$hyp \simeq 5.4$

(3) $\angle 1$ and $\angle 2$ are a linear pair. If $\angle 1 = 4n$ and $\angle 2 = 6n - 40$, what is $\angle 1$?

$4n + 6n - 40 = 180$

$10n - 40 = 180$

$+40 \quad +40$

$\frac{10n}{10} = \frac{220}{10}$

$n = 22$

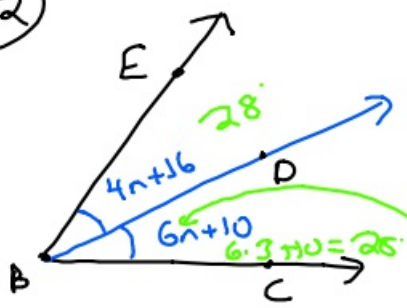
$\angle 1 = 4 \cdot n$

$= 4 \cdot 22$

$= 88$

8-30-19 7th Geo

(22)



28+28=56

$6n+10 = 4n+16$

$-4n \quad -4n$

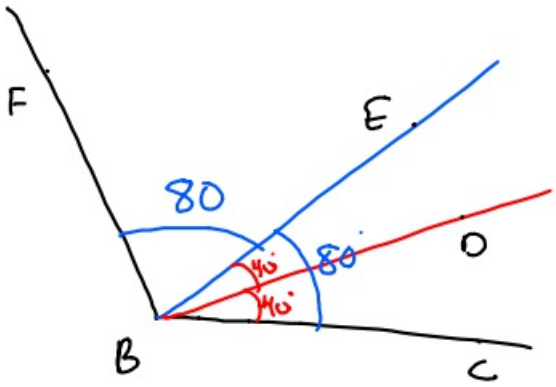
$2n+10 = 16$

$-10 \quad -10$

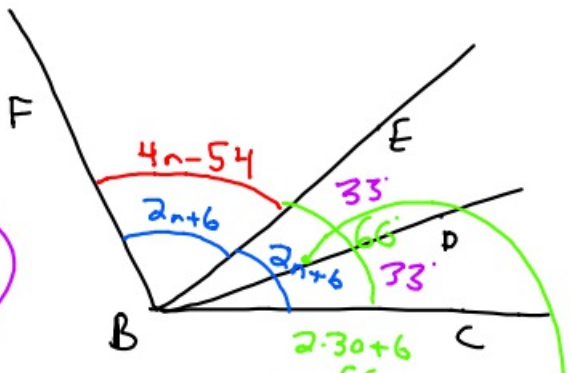
$2n = 6$

$n = 3$

(23)



(24)



33

$4n-54 = 2n+6$

$-2n \quad -2n$

$2n-54 = 6$

$+54 \quad +54$

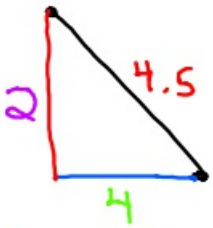
$2n = 60$

$n = 30$

New problems

① If $A=(-2,10)$ and $B=(-6,12)$, what is AB?

$(-2, 10)$
$(-6, 12)$
4



$2^2+4^2=hyp^2$

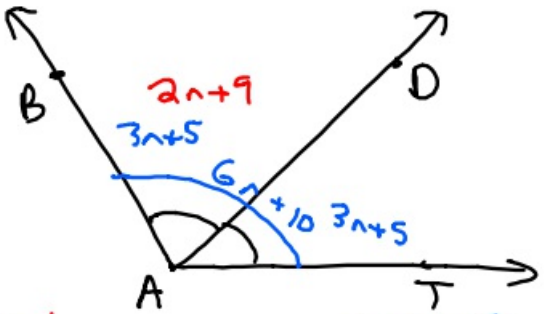
$4+16=hyp^2$

$\sqrt{20}=\sqrt{hyp^2}$

$4.5\approx hyp$

② $\overrightarrow{AD}$ bisects $\angle BAT$.

If $\angle BAT=6n+10$ and $\angle BAD=2n+9$, what is numerical value of $\angle DAT$?



option 1

$4n+18=6n+10$

$n=4$

option 2

$3n+5=2n+9$

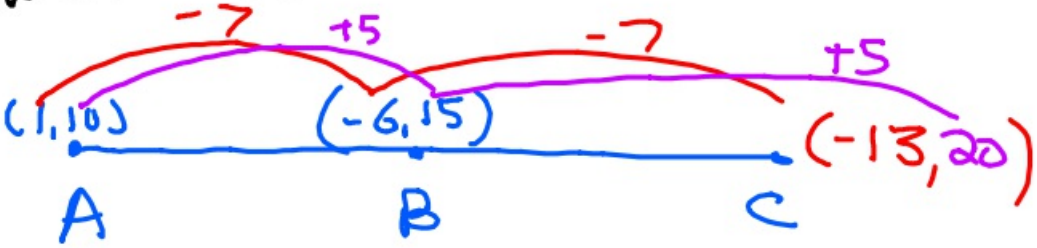
$n=4$

$\angle DAT=2n+9=2\cdot4+9=17$

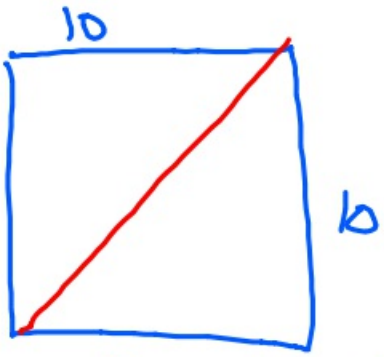
or

$3n+5=3\cdot4+5=17$

(3) B is the midpoint of $\overline{AC}$ with $A=(1,10)$ and $B=(-6,15)$. Where is C located?



(4) What is the diagonal length of a square with a side length of 10?



$10^2+10^2=hyp^2$

$\sqrt{200}=\sqrt{hyp^2}$

$hyp \approx 14.1$