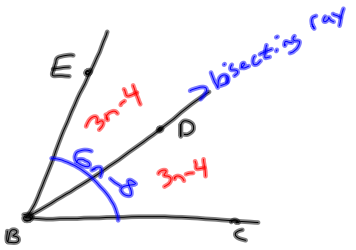
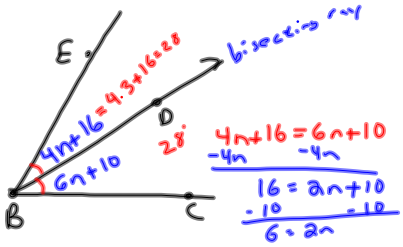
9-13-13
5th Geo

Geo Ch. 1 PT 1

(21) $\angle EBC = 6n-8$, what is $\angle EBD$?



(22) $\angle EBD = 4n+16$ and
$\angle DBC = 6n+10$
what is numerical value of $\angle EBC$.

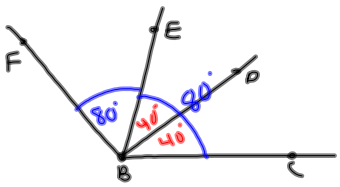


$4n+16 = 6n+10$
$-4n \quad -4n$
$16 = 2n+10$
$-10 \quad -10$
$6 = 2n$
$n = 3$

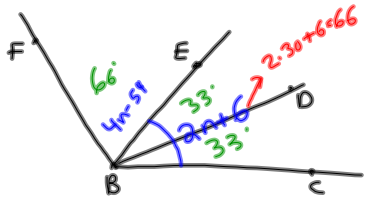
$28+28 = \boxed{56}$

(23) $\angle FBE = 80°$ what is $\angle EBD$?

40°



(24) If $\angle EBC = 2n+6$ and
$\angle FBE = 4n-54$, what is the numerical value of $\angle DBC$?



$4n-54 = 2n+6$
$-2n \quad -2n$
$2n-54 = 6$
$+54 \quad +54$
$2n = 60$
$n = 30$

(27) A=(7,15) B=(5,10)

AB = ?

$D = \sqrt{\Delta x^2 + \Delta y^2}$

$= \sqrt{2^2 + 5^2}$

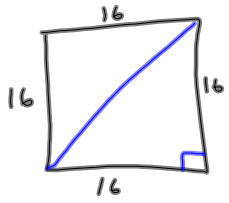
$= \sqrt{4+25}$

$= \sqrt{29}$

≈ 5.4

(25) Point A is at (1,10) and B is at (4,1). If B is the midpoint of $\overline{AC}$, what are the coordinates of C?

(17)



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

$16^2+16^2=c^2$

$256+256=c^2$

$\sqrt{512}=\sqrt{c^2}$

$c \approx 22.6$

(9) V is between R and Y.

RY = 30 VY = n+10 RV = ?

$RV + VY = RY$

$RV + n + 10 = 30$

$-n \quad -10 \qquad -n \quad -10$

$RV = 20 - n$

(10) (-1,2) to (3,-1).

$D = \sqrt{\Delta x^2 + \Delta y^2}$

$= \sqrt{4^2 + 3^2}$

$= \sqrt{16+9}$

$= \sqrt{25}$

$= 5$

(7) $\angle A + \angle B = 90^\circ$

$\downarrow \quad \downarrow$

$2n+6 + 3n+4 = 90^\circ$

$5n+10 = 90^\circ$

$-10 \quad -10$

$\frac{5n}{5} = \frac{80}{5}$

$n = 16$

$D = \sqrt{\Delta x^2 + \Delta y^2}$

$\angle B = 3n+4$

$3(16)+4$

$48+4$

52°

Could these be the measurements of a right triangle?

8, 10, 12

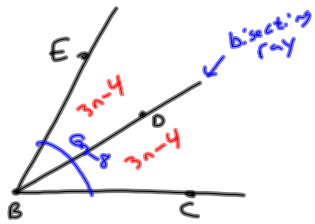
$8^2 + 10^2 = 12^2$?

$64 + 100 \neq 144$

9-13-13
6th Geo

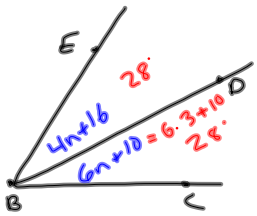
Ch. 1 PT 1

(21) $\angle EBC = 6n-8$ $\angle EBD = ?$



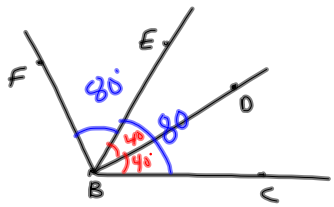
(22) $\angle EBD = 4n+16$
$\angle DBC = 6n+10$
Numerical value of $\angle EBC$

$28+28 = 56$

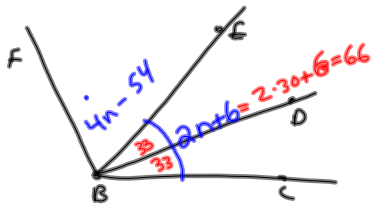


$6n+10 = 4n+16$
$-4n \quad -4n$
$2n+10 = 16$
$-10 \quad -10$
$2n = 6$
$n = 3$

(23) $\angle FBE = 80$
$\angle EBD = ?$ 40



(24) $\angle EBC = 2n+6$
$\angle FBE = 4n-54$
Numerical value of $\angle DBC$



$4n-54 = 2n+6$
$-2n \quad -2n$
$2n-54 = 6$
$+54 \quad +54$
$2n = 60$
$n = 30$

(27) $A=(-2,15)$ $B=(5,10)$ $AB=?$

$$D=\sqrt{\Delta x^2+\Delta y^2}$$
$$=\sqrt{2^2+5^2}$$
$$=\sqrt{4+25}$$
$$\sqrt{29}$$
$$\approx 5.4$$

(30)

$\angle A+\angle B=180^\circ$

$n+40+9n+20=180^\circ$

$10n+60=180$

$-60\ \ -60$

$10n=120$

$n=12$

$\angle B=9n+20$

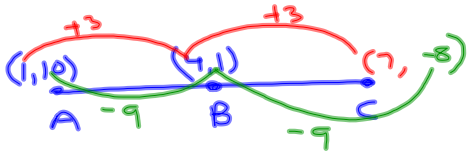
$9(12)+20$

$108+20=128^\circ$

(25) Pt. A = (1,10)

Pt B = (4,1)

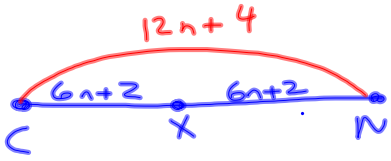
B is midpoint of $\overline{AC}$. C = ?



(10) (-1,2) (3,-1)

$$D=\sqrt{\Delta x^2+\Delta y^2}$$
$$=\sqrt{4^2+3^2}$$
$$\sqrt{16+9}$$
$$\sqrt{25}$$
$$5$$

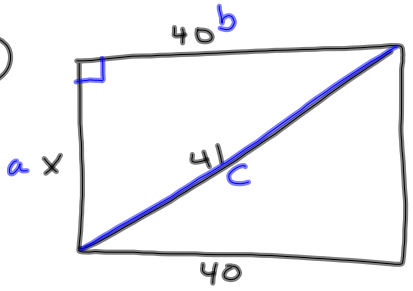
(14) If X is the midpoint of $\overline{CN}$ and $CX = 6n+2$, what is CN?



(18) (-3,4) (0,14)

$$D = \sqrt{\Delta x^2 + \Delta y^2}$$
$$= \sqrt{3^2 + 10^2}$$
$$= \sqrt{9 + 100}$$
$$= \sqrt{109}$$
$$\approx 10.4$$

(34)



$$a^2 + 40^2 = 41^2$$
$$a^2 + 1600 = 1681$$
$$-1600 \quad -1600$$
$$a^2 = 81$$
$$a = 9$$

(New) Could a right $\triangle$ have legs of 5, 6, and 7?

↑ nvp.

$$5^2 + 6^2 \stackrel{?}{=} 7^2$$
$$25 + 36 = 49$$
$$61 \stackrel{?}{=} 49$$
No