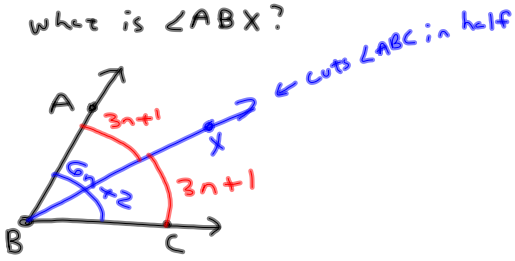
9-17-13

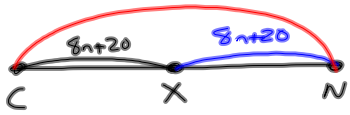
1st Geo

Ch 1 Practice Test 2 Questions

(18) $\overrightarrow{BX}$ bisects $\angle ABC$.
If $\angle ABC = 6n+2$,
what is $\angle ABX$?

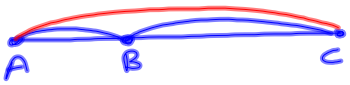


(14) If X is midpoint of $\overline{CN}$
and $CX = 8n+20$, what is CN?



$16n + 40$

(9) If B is between A and C
with $AC = 6n$ and $BC = n+1$,
what is AB?



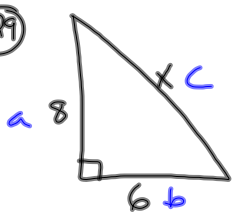
$AB + BC = AC$

$AB + n + 1 = 6n$

$-n-1 \quad -n-1$

$AB = 5n - 1$

(29)



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

$8^2 + 6^2 = c^2$

$64 + 36 = c^2$

$\sqrt{100} = \sqrt{c^2}$

$10 = c$

Test questions

What does each symbol below mean?

a.) $\therefore$ Therefore

b.) $\cong$ Congruent

c.) $\approx$ approximately

② $\angle A$ and $\angle B$ are complementary angles with $\angle A = 2n+10$ and $\angle B = 3n+4$. What is $m\angle B$?

$$\angle A + \angle B = 90^\circ$$

$$2n+10+3n+4 = 90^\circ$$

$$5n+14 = 90^\circ$$

$$-14 \quad -14$$

$$\frac{5n}{5} = \frac{76}{5}$$

$$n = 15.2$$

$\therefore \angle B = 3n+4$

$= 3(15.2)+4$

$= 45.6+4$

$= 49.6^\circ$

③ What is the midpoint of a line that has endpoints at $(-2,-1)$ and $(4,7)$?

$$\text{midpoint} = \left(\frac{-2+4}{2}, \frac{-1+7}{2}\right)$$

$$(1, 3)$$

④ What is the distance from $(1,2)$ to $(3,1)$?

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

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\sqrt{2^2 + 1^2}$$

$$\sqrt{4 + 1}$$

$$\sqrt{5}$$

$$\approx 2.2$$

⑤ If $A = (5,1)$ and $B = (2,10)$, what is AB?

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

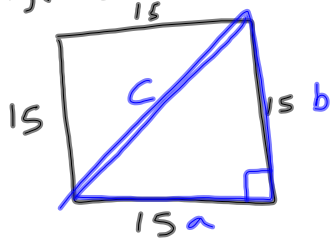
$$= \sqrt{3^2 + 9^2}$$

$$= \sqrt{9 + 81}$$

$$= \sqrt{90}$$

$$\approx 9.5$$

⑥ What is the diagonal length of a square with side length of 15 cm?



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

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

$$225 + 225 = c^2$$

$$\sqrt{450} = \sqrt{c^2}$$

$$21.2 \approx c$$