

6/14/2023

2nd Term Holiday Assignment

1- $58^\circ + a^\circ = 180^\circ$

~~$180^\circ - 58^\circ$~~ $a^\circ = 180^\circ - 58^\circ$

$a^\circ = \underline{\underline{122^\circ}}$

~~7- $y^\circ + 10 + 38 = 180^\circ$~~

$y^\circ = 180^\circ - 48$

$y^\circ = \underline{\underline{132^\circ}}$

11- $2y^\circ + 15 = 3y^\circ - 28$

$+15 + 28 = 3y^\circ - 2y^\circ$

~~$y^\circ = 43^\circ$~~

12- $2y^\circ + 18 = y^\circ + 39$

$+18 - 39 = 2y^\circ$

$y^\circ = \underline{\underline{21^\circ}}$

3- $102^\circ = b$ and $c = a$ ($180^\circ - 102^\circ = 78^\circ$)

~~102°~~

$\therefore \underline{\underline{b = 102^\circ, c = 78^\circ, a = 78^\circ}}$

$$2. b^\circ + 78^\circ + 43^\circ = 180^\circ$$

$$b^\circ = 180^\circ - 121^\circ$$

$$b^\circ = \underline{\underline{59^\circ}}$$

$$4. a^\circ = 180^\circ - 138^\circ = \underline{\underline{42^\circ}}$$

$$b^\circ = 90^\circ + 42^\circ = 132^\circ = 180^\circ - 132^\circ = \underline{\underline{48^\circ}}$$

$$c^\circ = a^\circ = \underline{\underline{42^\circ}} \text{ (vertically opposite angles)}$$

$$5. F^\circ = 65^\circ, D^\circ = 65^\circ \text{ (opposite angles are equal)}$$

$$E^\circ = 180^\circ - 65^\circ$$

$$E^\circ = \underline{\underline{115^\circ}}$$

$$6. y^\circ = 180^\circ - 110^\circ$$

$$y^\circ = \underline{\underline{70^\circ}}$$

$$8. y^\circ + 20^\circ = 112^\circ$$

$$y^\circ = 112^\circ - 20^\circ$$

$$y^\circ = \underline{\underline{92^\circ}}$$

$$9. y^\circ + 20^\circ + y^\circ + 60^\circ + 158^\circ = 360^\circ$$

$$2y^\circ + 238^\circ = 360^\circ$$

$$2y^\circ = 360^\circ - 238^\circ$$

$$2y^\circ = 112^\circ$$

$$112^\circ \div 2 = \underline{\underline{61^\circ}}$$

~~10. $5y^\circ + 4y^\circ + 2y^\circ + y^\circ = 360^\circ$~~
 ~~$12y^\circ = 360^\circ \div 2$~~

10. $5y^\circ + 4y^\circ + 2y^\circ + y^\circ = 360^\circ$

$12y^\circ = 360^\circ$

12 12

$y^\circ = 30^\circ$