

L's worksheet

ex1 The supplement of an angle is 6 less than 3 times the complement

$$\begin{aligned} \text{Let } x &= \angle \text{ measure} \\ 90 - x &= \text{Complement of } \angle \\ 180 - x &= \text{Supplement of } \angle. \end{aligned}$$

The suppl of an \angle is 6 less than 3 times compl
 $180 - x = 3(90 - x) - 6$ in front

$$180 - x = 270 - 3x - 6$$

$$180 - x = 264 - 3x$$

$$2x = 84$$

$$\boxed{x = 42}$$

$$\boxed{180 - x = 138}$$

$$\boxed{90 - x = 48}$$

ex2 The supplement of an angle is 38 more than twice the complement

$$\begin{aligned} \text{Let } x &= \text{measure of } \angle \\ 90 - x &= \text{Complement of } \angle \\ 180 - x &= \text{Supplement of } \angle \end{aligned}$$

$$180 - x = 38 + 2(90 - x)$$

$$180 - x = 38 + 180 - 2x$$

$$180 - x = 218 - 2x$$

$$\boxed{x = 38}$$

$$\boxed{180 - x = 142}$$

$$\boxed{90 - x = 52}$$

