Answers for Tue. 12/05/2020 MK P7 MTC Pg 119-120

1 $x + 70^\circ = 180^\circ$ (co-int Ls)

$x + 70 - 70 = 180^\circ - 70^\circ$

$x + 0 = 110^\circ$

$x = 110^\circ$

OR:

$x - 40 + 110^\circ = 180^\circ$

$x - 40 + 110^\circ - 110^\circ = 180^\circ - 110^\circ$

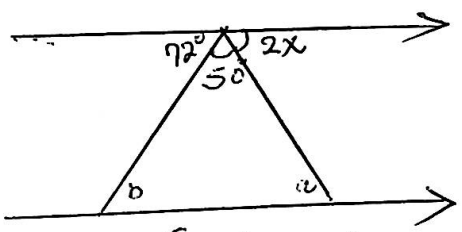
$x - 40^\circ = 70^\circ$

$x - 40^\circ + 40^\circ = 70^\circ + 40^\circ$

$x - 0 = 110^\circ$

$x = 110^\circ$

4



$a = 2x$ (alternate angles)

$b = 72^\circ$ (alternate Ls)

$a + b + 50^\circ = 180^\circ$

$2x + 72 + 50 = 180$

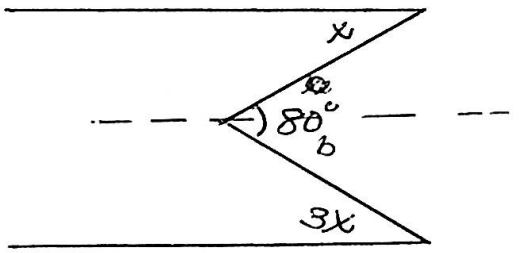
$2x + 122^\circ = 180^\circ$

$2x + 122^\circ - 122^\circ = 180^\circ - 122^\circ$

$\frac{2x}{2} = \frac{58}{2}$, 29

$x = 29$

7



$a = x$ (alternate Ls)

$b = 3x$ (alternate Ls)

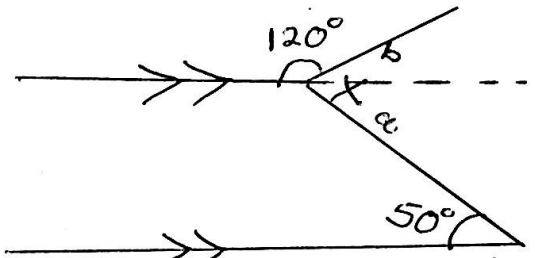
$a + b = 80^\circ$

$x + 3x = 80^\circ$

$\frac{4x}{4} = \frac{80^\circ}{4}$, 20

$x = 20^\circ$

10



$a = 50^\circ$ (alternate Ls)

$b + 120 = 180^\circ$ (Ls on a straight line).

$b + 120 - 120 = 180 - 120$

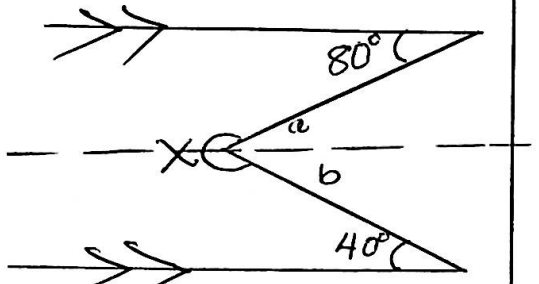
$b = 60^\circ$

$x = a + b$

$= 60^\circ + 50^\circ$

$= 110^\circ$

11



$a = 80^\circ$ (Alternate $\angle$s)

$b = 40^\circ$ (Alternate $\angle$s)

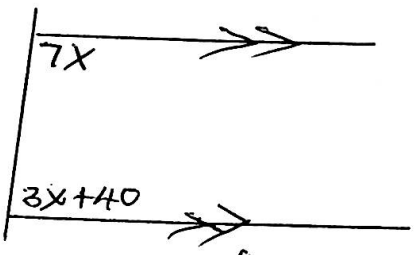
$X = 360^\circ - (a+b)$

$X = 360^\circ - 80^\circ + 40$

$X = 360^\circ - 120^\circ$

$X = 240^\circ$

12



$7X + 3X + 40^\circ = 180^\circ$

(co-interior angles)

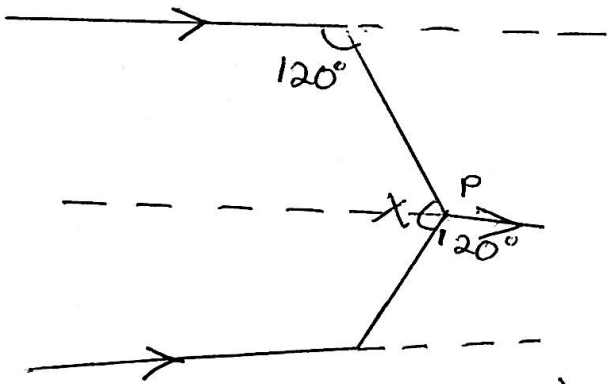
$10X + 40^\circ = 180^\circ$

$10X + 40^\circ - 40^\circ = 180^\circ - 40^\circ$

$\frac{10X}{10} = \frac{140^\circ}{10}$

$X = 14^\circ$

13



$P = 120^\circ$ (alternate $\angle$s)

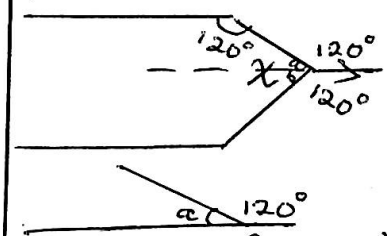
$X = 360^\circ - (P + 120^\circ)$

$X = 360^\circ - (120^\circ + 120^\circ)$

$X = 360^\circ - 240^\circ$

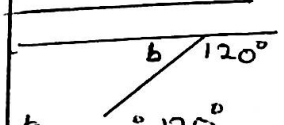
$X = 120^\circ$

Method II



$a = 180^\circ - 120^\circ$ ($\angle$s on straight line)

$a = 60^\circ$



$b = 180^\circ - 120^\circ$

$= 60^\circ$

$X = a + b$

$X = 60^\circ + 60^\circ$

$X = 120^\circ$