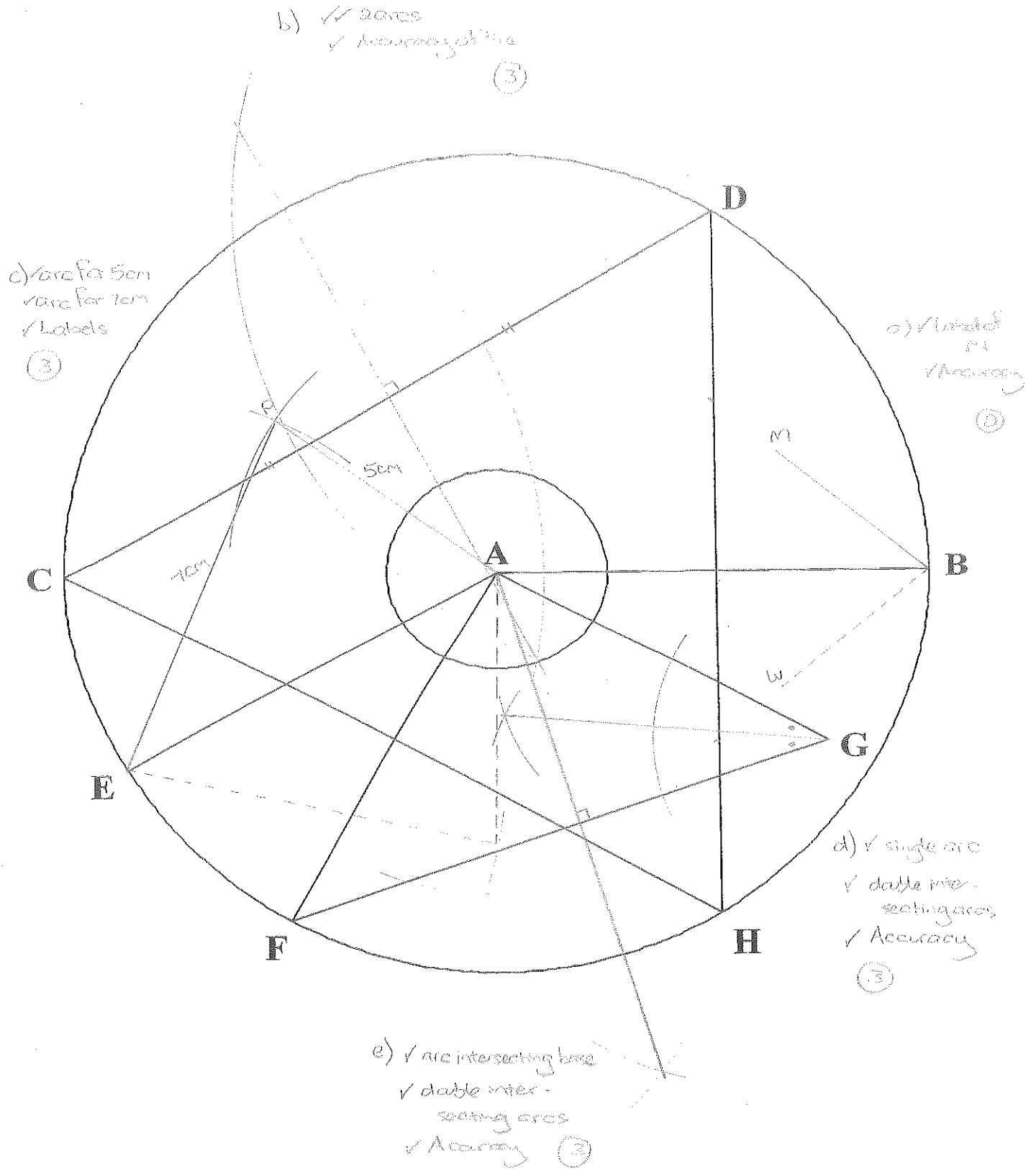


Name: MEMO

Teacher: ED SI WI ZE

Quest 2:



GR 8 - JUNE 2017 PAPER 2 MEMO
[110]

QUEST 1:

- a) reflex ✓
- b) 8 ✓
- c) the sum of the interior opposite angles ✓
- d) supplementary ✓
- e) 27° ✓
- f) supplementary ✓
- g) $3x - 38^\circ$ ✓

(7)

QUEST 3:

- a) $x = 10^\circ$ ✓ (LS around pt) P
- b) $\hat{BDC} = 12^\circ$ (LS on str. line BE) E
 $x = 12^\circ$ ✓ (corr. LS; AB // CD)
- c) $x = 19^\circ$ ✓ (L sum of Δ) N
- d) $x = 15^\circ$ ✓ (vert. opp. LS =) D
- e) $x = 17^\circ$ ✓ (L sum of quad) R
- f) $x = 21^\circ$ ✓ (co-int. LS; // lines) A
- g) $\hat{MPO} = 90^\circ$ (diags of rhombus) ✓
 $\hat{POM} = 85^\circ$ (diags of rhombus) ✓
 $x = 5^\circ$ ✓ (L sum of ΔMPO) G
- h) $\hat{CPM} = x$ (LS opp. equal sides, radii) ✓
 $x = 14^\circ$ ✓ (L sum of ΔCPM) O
- i) $x = 7^\circ$ ✓ (ext. L of Δ) N

(18)

QUEST 5:

- a) 73° ✓ (LS opp. equal sides; AB = AC) ✓
- b) 34° ✓ (L sum of ΔABC) ✓
- c) 34° ✓ (vert. opp. LS are =) ✓
- d) 87° ✓ (LS on str. line MC) ✓
- e) 73° ✓ (corr. LS; MC // HD) ✓
- f) 86° ✓ (ext. L of ΔMAL) ✓
- g) 86° ✓ (alt. LS; ME // KF) ✓
- h) 93° ✓ (co-int. LS; MC // HD) ✓
- i) $\hat{JGF} = 93^\circ$ (vert. opp. LS are =) ✓
- $\therefore k = 102^\circ$ ✓ (L sum of quad EFGJ)

(18)

If they make a mistake, mark positively from there on, carrying their mistake

QUEST 6:

- $\hat{MED} = 17^\circ$ ✓ (ext. L of ΔMED)
- $\hat{ENG} = 17^\circ$ ✓ (alt. LS; ME // NG) ✓
- $\hat{LTK} = 40^\circ$ ✓ (corr. LS; HT // VK) ✓
- $\hat{NLK} = 40^\circ$ ✓ (corr. LS; DE // LN) ✓
- $\therefore x = 50^\circ$ ✓ (L sum of ΔLNK) ✓

(10)

QUEST 7:

- a) $a + 11^\circ + 3a + 6^\circ + 4a + 3^\circ = 180^\circ$ (L sum of ΔBAT) ✓
 $\therefore 8a + 20^\circ = 180^\circ$ ✓
 $\therefore 8a = 160^\circ$ ✓
 $\therefore a = 20^\circ$ ✓
- b) $7b - 13^\circ = b + 20^\circ + 3b + 15^\circ$ (ext. L of ΔBAT) ✓
 $\therefore 7b - 13^\circ = 4b + 35^\circ$ ✓
 $\therefore 3b - 13^\circ = 35^\circ$ ✓
 $\therefore 3b = 48^\circ$ ✓
 $\therefore b = 16^\circ$ ✓
- c) $\hat{BAT} = 90^\circ - c$ (LS on str. line RE) ✓
 $\therefore 5c - 50^\circ + 90^\circ - c = 2c + 80^\circ$ (ext. L of ΔBAT) ✓
 $\therefore 4c + 40^\circ = 2c + 80^\circ$ ✓
 $2c + 40^\circ = 80^\circ$ ✓
 $2c = 40^\circ$ ✓
 $c = 20^\circ$ ✓

(4)

(4)

(2)

QUEST 8:

- a) $3x + 54^\circ = x + 70^\circ$ (alt. LS; TE // OM) ✓
 $\therefore 2x + 19^\circ = 70^\circ$ ✓
 $\therefore 2x = 16^\circ$ ✓
 $\therefore x = 8^\circ$ ✓
- b) $108^\circ - 2y + y + 10^\circ + 3y + 33^\circ = 180^\circ$ (co-int. LS; RT // WD) ✓
 $\therefore 2y + 146^\circ = 180^\circ$ ✓
 $\therefore 2y = 34^\circ$ ✓
 $\therefore y = 17^\circ$ ✓
- c) $\hat{RAW} = 84^\circ$ (L sum of ΔRAW) ✓
 $\therefore x + y + z = 84^\circ$ (alt. LS; RI // WM) ✓
 $\therefore 8 + 17 + z = 84^\circ$ ✓
 $\therefore z = 59^\circ$ ✓

(3)

(3)

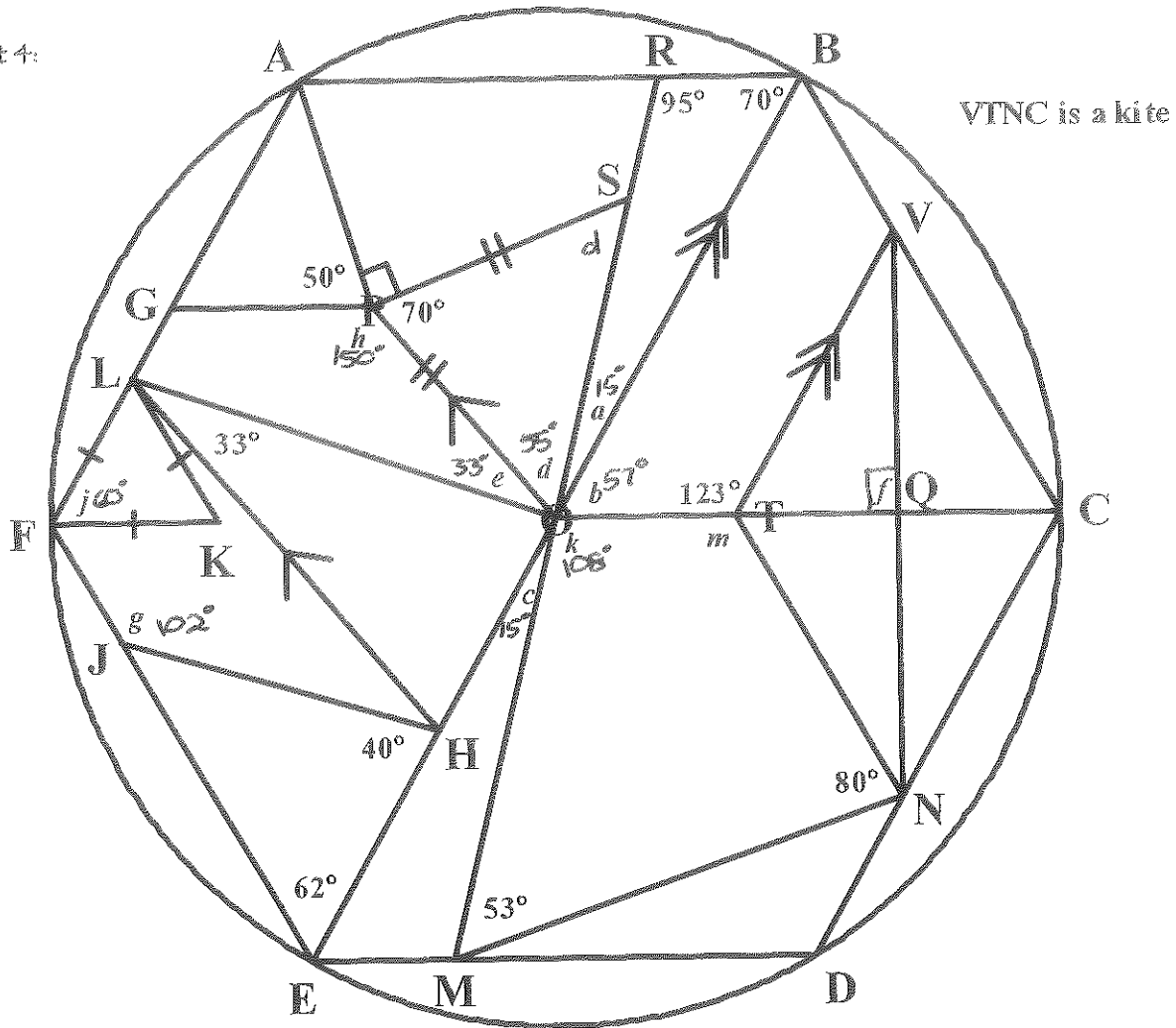
(3)

QUEST 9:

- $g = 10^\circ$ (L sum of ΔBEA)
- $p = 15^\circ$ (LS around pt A)
- $t = 8^\circ$ (alt. LS; UC // SN)
- $y = 12^\circ$ (corr. LS; SA // LB)
- $a = 20^\circ$ (vert. opp. LS =)
- $e = 1^\circ$ (ext. L of ΔGIN)
- $d = 50^\circ$ (ext. L of ΔDFG)
- $f = 10^\circ$ (L sum of ΔPDM & LS on str. line BL)
- $m = 8^\circ$ (co-int. LS; WH // GF)
- $\therefore x = 16^\circ$ (co-int. LS; WH // GF) ✓

(2)

Quest 4:



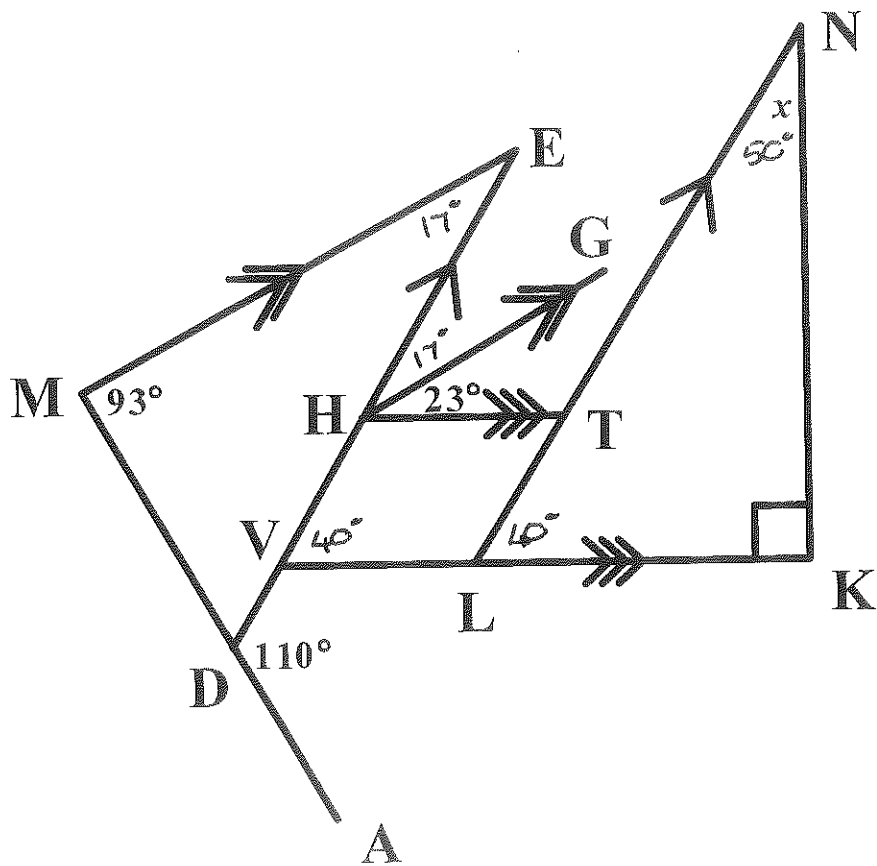
VTNC is a kite

Value of angle	Reason
$a = 15^\circ$ ✓	\angle sum of $\triangle ROB$ ✓
$b = 57^\circ$ ✓	co-int. \angle s ; $EB \parallel TV$ ✓
$c = 15^\circ$ ✓	vert. opp. \angle s are = ✓
$\hat{P}SO = a$	\angle s opp. equal sides ; $PS = PO$ ✓
$d = 55^\circ$ ✓	\angle sum of $\triangle PSO$
$e = 33^\circ$ ✓	alt. \angle s ; $OP \parallel HL$ ✓
$f = 90^\circ$ ✓	diags of kite VTNC ✓
$g = 102^\circ$ ✓	ext. \angle of $\triangle HJE$ ✓
$h = 150^\circ$ ✓	\angle s around pt P ✓
$j = 60^\circ$ ✓	equilateral $\triangle FLK$ ✓
$k = 108^\circ$ ✓	\angle s on str. line RM ✓
$m = 119^\circ$ ✓	\angle sum of quad OTNM ✓

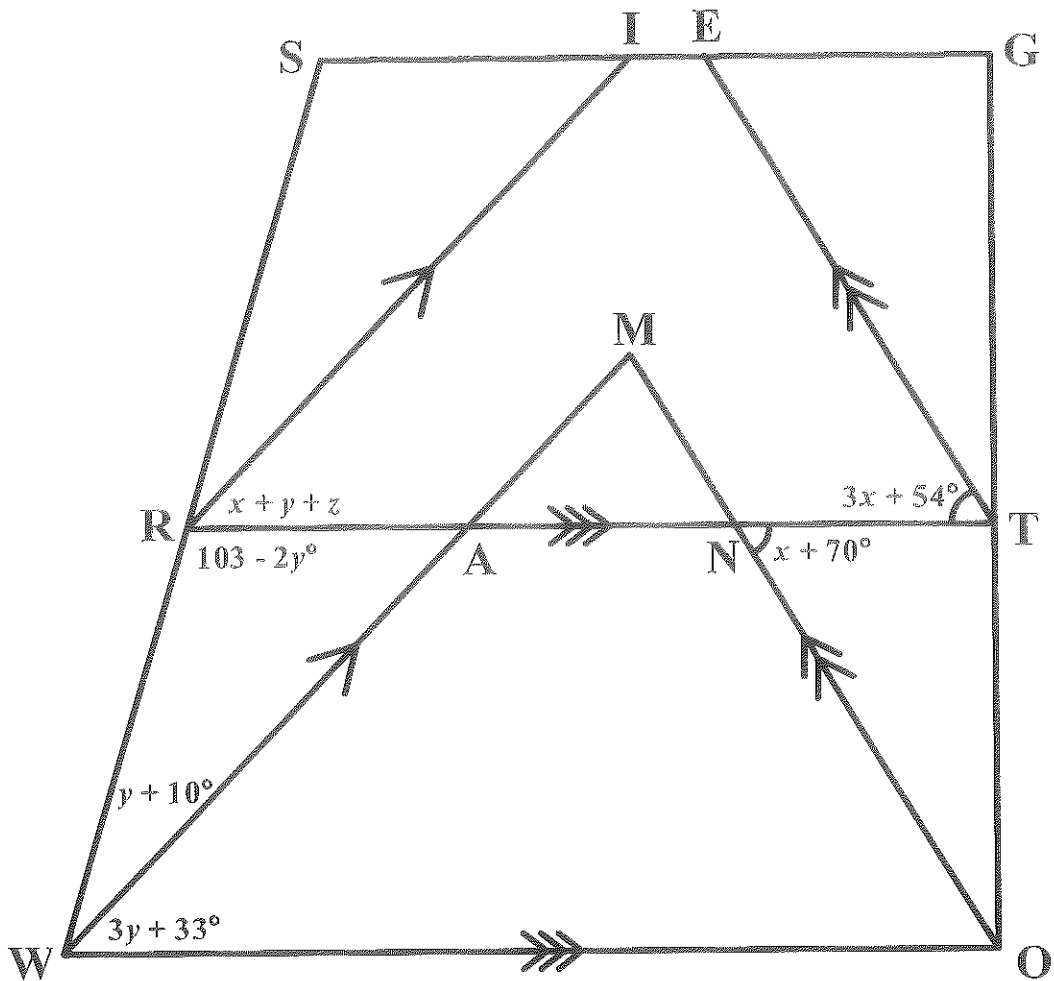
Quest 5:



Quest 6:



Quest 8:



Quest 9:

