

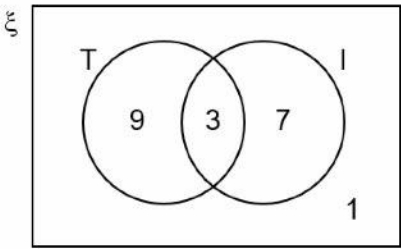
JABATAN PENDIDIKAN NEGERI MELAKA  
PERATURAN PEMARKAHAN UJIAN DIAGNOSTIK 3 TAHUN 2026  
TINGKATAN 5

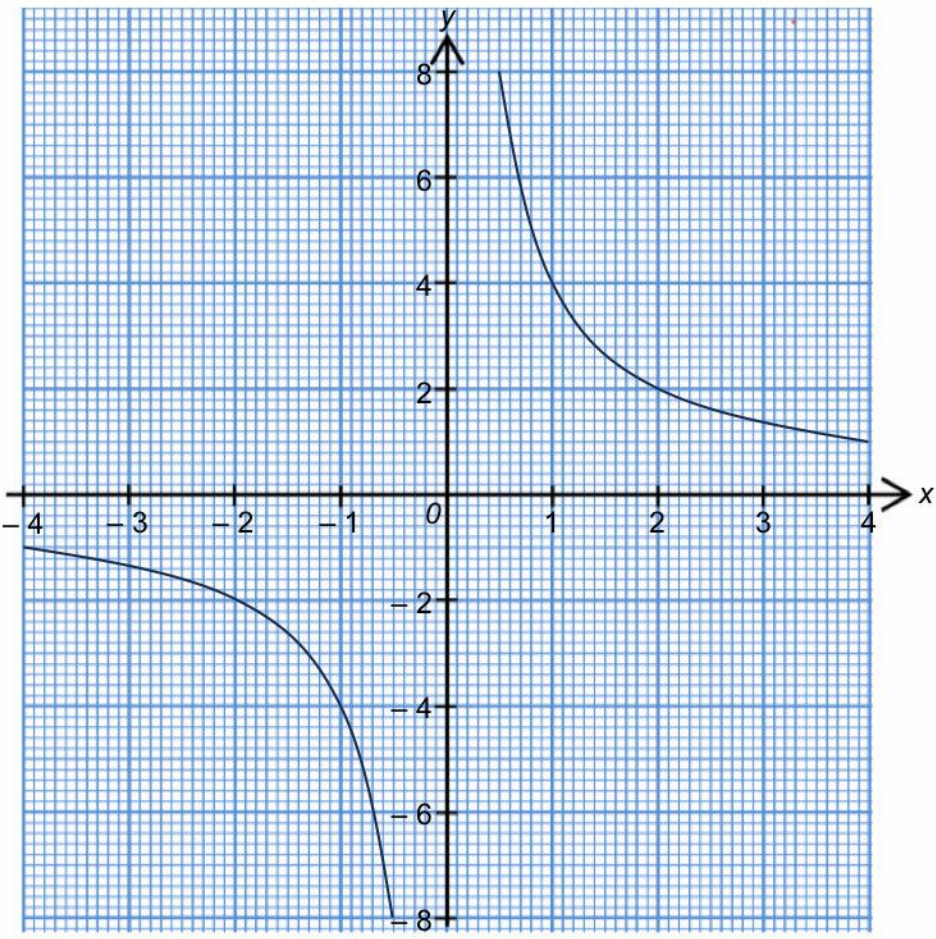
**MATEMATIK KERTAS 1 (1449/1)**

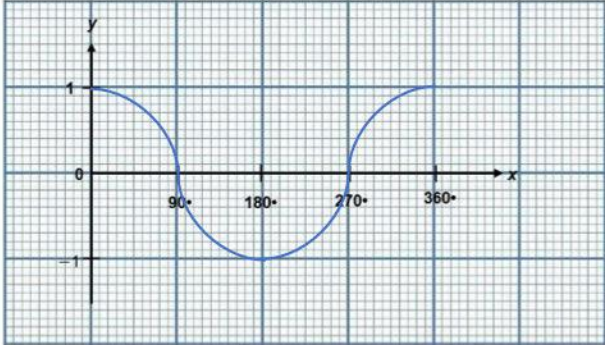
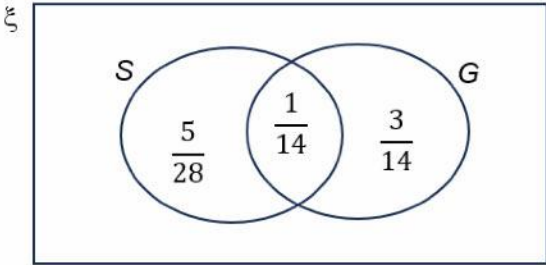
| SOALAN | JAWAPAN | SOALAN | JAWAPAN | SOALAN | JAWAPAN | SOALAN | JAWAPAN |
|--------|---------|--------|---------|--------|---------|--------|---------|
| 1      | A       | 11     | A       | 21     | B       | 31     | A       |
| 2      | C       | 12     | C       | 22     | D       | 32     | C       |
| 3      | C       | 13     | C       | 23     | D       | 33     | B       |
| 4      | B       | 14     | D       | 24     | B       | 34     | D       |
| 5      | D       | 15     | B       | 25     | A       | 35     | D       |
| 6      | A       | 16     | D       | 26     | A       | 36     | C       |
| 7      | B       | 17     | A       | 27     | B       | 37     | A       |
| 8      | D       | 18     | B       | 28     | B       | 38     | C       |
| 9      | C       | 19     | A       | 29     | D       | 39     | B       |
| 10     | D       | 20     | C       | 30     | D       | 40     | D       |

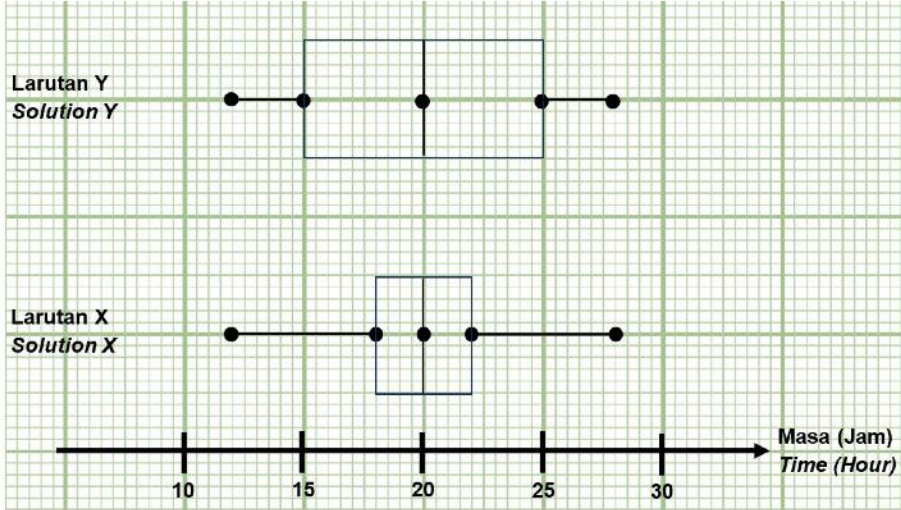
JABATAN PENDIDIKAN NEGERI MELAKA  
PERATURAN PEMARKAHAN UJIAN DIAGNOSTIK 3 TAHUN 2026  
TINGKATAN 5

**MATEMATIK KERTAS 2 (1449/2)**

| Soalan           | Peraturan Pemarkahan                                                                                                                                                                                                         | Markah     |          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|
| <b>1</b> (a)     | Jika 40 ialah nombor genap, maka 40 boleh dibahagi tepat dengan 10.                                                                                                                                                          | 1          | <b>5</b> |
|                  | Jika 40 boleh dibahagi tepat dengan 10, maka 40 ialah nombor genap.                                                                                                                                                          | 1          |          |
|                  | (b) $(m + 7)(m - 7) \neq 0$<br>$m^2 \neq 49$                                                                                                                                                                                 | 1<br>1     |          |
|                  | (c) 6 tidak boleh dibahagi tepat dengan 2                                                                                                                                                                                    | 1          |          |
| <b>2</b>         | $(25.90 \times 2 + 15.70) + (25.90 \times 2 + 15.70) \times 6\%$<br><u>Nota:</u><br>$25.90 \times 2 + 15.70$ <u>atau</u> $(25.90 \times 2 + 15.70) \times 6\%$ , beri 1 markah<br>71.55                                      | 2<br><br>1 | <b>3</b> |
| <b>3</b> (a)     | $\angle CED$                                                                                                                                                                                                                 | 1          | <b>3</b> |
|                  | (b) $\tan \theta = \frac{1.22}{4.57}$                                                                                                                                                                                        | 1          |          |
|                  | 14.95°                                                                                                                                                                                                                       | 1          |          |
| <b>4</b> (a) (i) | $1011_2$                                                                                                                                                                                                                     | 1          | <b>4</b> |
|                  | (ii) $406_8$                                                                                                                                                                                                                 | 1          |          |
|                  | (b) $2 \times 6^3 + 3 \times 6^2 + 0 \times 6^1 + 5 \times 6^0$ <u>atau</u> setara<br>545                                                                                                                                    | 1<br>1     |          |
|                  |                                                                                                                                                                                                                              |            |          |
| <b>5</b> (a)     |  <p><u>Nota :</u><br/>Gambar rajah Venn dengan label yang betul tanpa bilangan unsur <u>atau</u> bilangan unsur salah, beri 1 markah</p> | 2          | <b>4</b> |
|                  | (b) (i) 16                                                                                                                                                                                                                   | 1          |          |
|                  | (ii) 1                                                                                                                                                                                                                       | 1          |          |

| Soalan              | Peraturan Pemarkahan                                                                                                                                                                                                                                                                                                                                               | Markah |   |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|
| 6 (a)<br>(b)        | 1                                                                                                                                                                                                                                                                                                                                                                  | 1      |   |
|                     |  <p>Semua 8 titik diplot dengan betul atau lengkung melalui semua titik untuk <math>-4 \leq x \leq 4</math> dan <math>-8 \leq y \leq 8</math>.</p> <p><u>Nota :</u><br/>6 atau 7 titik diplot dengan betul, beri 1 markah<br/>Lengkung yang licin dan melalui semua 8 titik</p> | 2      |   |
|                     |                                                                                                                                                                                                                                                                                                                                                                    | 1      | 4 |
| 7 (a)<br>(b)        | 2.64                                                                                                                                                                                                                                                                                                                                                               | 1      |   |
|                     | $\left( \frac{250000}{1000} \times 2.64 \right) + \left( \frac{62\,500}{1000} \times 1.80 \right)$ <p><u>Nota :</u><br/><math>\frac{25}{100} \times 250\,000</math> <u>atau</u> setara, beri 1 markah<br/>772.50</p>                                                                                                                                               | 2      |   |
| 8 (a)<br>(b)<br>(c) | $m = 180$<br>$n = 45$                                                                                                                                                                                                                                                                                                                                              | 1      |   |
|                     | 15                                                                                                                                                                                                                                                                                                                                                                 | 1      |   |
|                     | $\frac{210}{195 \div 60}$                                                                                                                                                                                                                                                                                                                                          | 1      |   |
|                     | $64\frac{8}{13}$ <u>atau</u> 64.62                                                                                                                                                                                                                                                                                                                                 | 1      | 5 |

| Soalan                              | Peraturan Pemarkahan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Markah                                                         |   |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---|
| <p>9 (a)</p> <p>(b)</p>             | <p>12 <u>atau</u> <math>\sqrt{12^2 + 16^2}</math> <u>atau</u> 20 dilihat</p> <p><math>-\frac{4}{5}</math></p>  <p>Semua 5 titik diplot dengan betul</p> <p>Lengkung yang licin dan melalui semua titik</p>                                                                                                                                                                                                                                                                                                                                                                                          | <p>1</p> <p>1</p>                                              | 4 |
| <p>10 (a)</p> <p>(b)</p>            |  <p>Ketiga-tiga nilai kebarangkalian ditulis dengan betul</p> <p><u>Nota :</u></p> <p>1. <math>\frac{5}{28}</math> <u>atau</u> <math>\frac{1}{14}</math> <u>atau</u> <math>\frac{3}{14}</math> dilihat, beri 1 markah</p> <p>2. Abaikan nilai kebarangkalian <math>(S \cup G)'</math></p> <p><math>\frac{1}{4} + \frac{2}{7} - (\frac{1}{4} \times \frac{2}{7})</math></p> <p><math>\frac{13}{28}</math></p>                                                                                                                                                                                       | <p>2</p> <p>1</p> <p>1</p>                                     | 4 |
| <p>11 (a)</p> <p>(b)</p> <p>(c)</p> | <p><math>q(-1) - (-4)(2) = 0</math></p> <p>8</p> <p><math>2 + 4x = 5x</math> <u>atau</u> <math>3x - 4 = 6x - 2</math> <u>atau</u> setara</p> <p>2</p> <p><math>25x + 20y = 37</math> <u>atau</u> <math>35x + 24y = 48</math></p> <p><math>\begin{bmatrix} 25 &amp; 20 \\ 35 &amp; 24 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 37 \\ 48 \end{bmatrix}</math></p> <p><math>\frac{1}{25(24) - (20)(35)} \begin{pmatrix} 24 &amp; -20 \\ -35 &amp; 25 \end{pmatrix} \begin{pmatrix} 37 \\ 48 \end{pmatrix}</math></p> <p><math>x = 0.72</math> <u>atau</u> <math>\frac{18}{25}</math></p> <p><math>y = 0.95</math> <u>atau</u> <math>\frac{19}{20}</math></p> | <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> | 9 |
|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                |   |

| Soalan | Peraturan Pemarkahan                                                                | Markah |  |
|--------|-------------------------------------------------------------------------------------|--------|--|
| 12 (a) | $\frac{12+18+19+21+22+28}{6} \quad \text{atau} \quad \frac{12+15+18+22+25+28}{6}$   | 1      |  |
|        | <u>atau</u> 20                                                                      | 1      |  |
|        | $\sqrt{\frac{12^2+18^2+19^2+21^2+22^2+28^2}{6}} - 20^2$                             | 1      |  |
|        | 4.796                                                                               | 1      |  |
|        | $\sqrt{\frac{12^2+15^2+18^2+22^2+25^2+28^2}{6}} - 20^2$                             | 1      |  |
|        | 5.568                                                                               | 1      |  |
| (b)    | Larutan X                                                                           | 1      |  |
|        | Sisihan piawainya lebih kecil <u>atau</u> setara                                    | 1      |  |
| (c)    |  | 1      |  |
|        |                                                                                     | 1      |  |
|        |                                                                                     | 9      |  |

| Soalan |         | Peraturan Pemarkahan                                                                                                                                                                                                               | Markah           |    |
|--------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|
| 13     | (a) (i) | $\{K, L, J, T\}$ <u>atau</u> setara                                                                                                                                                                                                | 1                | 8  |
|        | (ii)    | 12                                                                                                                                                                                                                                 | 1                |    |
|        | (iii)   | Terima mana-mana pokok yang betul dengan bucu berlabel dan tepi berpemberat.<br><u>Nota :</u><br>Mana-mana pokok yang betul tanpa pemberat, beri 1 markah                                                                          | 2                |    |
|        | (b) (i) | $T \rightarrow J \rightarrow L$                                                                                                                                                                                                    | 1                |    |
|        |         | 20                                                                                                                                                                                                                                 | 1                |    |
|        | (ii)    | $2.20 + 2.70$                                                                                                                                                                                                                      | 1                |    |
|        |         | 4.90                                                                                                                                                                                                                               | 1                |    |
| 14     | (a)     | $x + y \leq 60$<br>$y \geq 2x$                                                                                                                                                                                                     | 1<br>1           | 10 |
|        | (b)     | <u>Rujuk lampiran</u><br>Kedua-dua paksi dilukis dengan skala seragam untuk $x \geq 0$ dan $y \geq 0$<br>Garis lurus $x + y = 60$ dilukis dengan betul<br>Garis lurus $y = 2x$ dilukis dengan betul<br>Rantau dilorek dengan betul | 1<br>1<br>1<br>1 |    |
|        | (c) (i) | Boleh, kerana berada dalam rantau berlorek<br><u>Nota :</u><br>Terima jawapan boleh tanpa justifikasi, beri 1 markah                                                                                                               | 2                |    |
|        | (ii)    | 20                                                                                                                                                                                                                                 | 1                |    |
|        |         | 50                                                                                                                                                                                                                                 | 1                |    |
|        |         |                                                                                                                                                                                                                                    |                  |    |
|        |         |                                                                                                                                                                                                                                    |                  |    |
| 15     | (a) (i) | (1, 6)<br><u>Nota:</u><br>Titik (3, 4) ditanda pada rajah <u>atau</u> (3, 4) dilihat, beri 1 markah                                                                                                                                | 2                | 9  |
|        | (ii)    | (-3, 0)<br><u>Nota :</u><br>Titik (-3, 2) ditanda pada rajah <u>atau</u> (-3, 2) dilihat, beri 1 markah                                                                                                                            | 2                |    |
|        | (b) (i) | Translasi $\begin{pmatrix} 7 \\ 6 \end{pmatrix}$<br><u>Nota :</u><br>Translasi, beri 1 markah                                                                                                                                      | 2                |    |
|        | (ii)    | Pembesaran dengan faktor skala 2 pada pusat (2, 1) atau titik S<br><u>Nota :</u><br>1. Pembesaran, pada pusat (2,1) atau titik S <u>atau</u> Pembesaran dengan faktor skala 2, beri 2 markah<br>2. Pembesaran, beri 1 markah       | 3                |    |
|        |         |                                                                                                                                                                                                                                    |                  |    |

| Soalan |         | Peraturan Pemarkahan                                                                                                                                                                            | Markah           |    |
|--------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|
| 16     | (a)     | $\frac{1}{2}(x+10)(x-6) = 256$ <u>atau</u> setara<br>$(x-22)(x+26) = 0$<br>$x = 22$<br>64 <u>atau</u> 80                                                                                        | 1<br>1<br>1<br>1 | 4  |
|        | (b)     | $3x + 2y = 860$ <u>atau</u> $2x + 4y = 920$ <u>atau</u> setara<br>$4x = 800$ <u>atau</u> $8y = 1040$ <u>atau</u> $2x = 400$ <u>atau</u> $4y = 420$ <u>atau</u> setara<br>$x = 200$<br>$y = 130$ | 1<br>1<br>1<br>1 | 4  |
|        | (c)     | $\frac{22}{7} \times 0.75^2 \times t = \frac{1}{2}(3.96)$ <u>atau</u> setara<br><u>Nota :</u><br>$\frac{22}{7} \times 0.75^2 \times t$ dilihat <u>atau</u> setara, beri 1 markah<br>1.12        | 2<br><br>1       | 3  |
|        | (d) (i) | $\frac{4000}{1.05} + \frac{4000}{1.03} + \frac{4000}{1.00} + \frac{4000}{1.06}$ <u>atau</u> 3809 + 3883 + 4000 + 3773 <u>atau</u> setara<br>15 465                                              | 1<br>1           | 4  |
|        | (ii)    | $\frac{16\ 000}{15\ 465}$<br>1.03                                                                                                                                                               | 1<br>1           |    |
|        |         |                                                                                                                                                                                                 | 1                | 15 |
|        | (a) (i) | $20 = k(4)(10)$ <u>atau</u> $k = 0.5$<br>$C = 0.5MD$                                                                                                                                            | 1<br>1           | 4  |
|        | (ii)    | $56.25 = 0.5(15)D$ <u>atau</u> 7.5<br>7500                                                                                                                                                      | 1<br>1           |    |
|        | (b) (i) | $3x + 2y = 11$<br>$5x + 4y = 21$                                                                                                                                                                | 1<br>1           | 4  |
|        | (ii)    | $5\left(\frac{11-2y}{3}\right) + 4y = 21$ <u>atau</u> setara<br><u>Nota:</u><br>$6x + 4y = 22$ <u>atau</u> setara, beri 1 markah<br>$x = 1$ dan $y = 4$                                         | 1<br><br>1       |    |
| 17     | (c)     | 48 – 36<br><u>Nota:</u><br>48 <u>atau</u> 36 dilihat, beri 1 markah<br>12                                                                                                                       | 2<br><br>1       | 3  |
|        | (d)     | $75\ 000 + 525\ 000 + 575\ 000$ <u>atau</u> 1 175 000 dilihat<br>$\frac{(1\ 450\ 000 + 35\ 000) - (75\ 000 + 525\ 000 + 575\ 000)}{750\ 000} \times 100$<br>41.33                               | 1<br>2<br>1      | 4  |
|        |         |                                                                                                                                                                                                 |                  | 15 |
|        |         |                                                                                                                                                                                                 |                  |    |

Graf untuk Soalan 14(b)  
Graph for Question 14(b)

