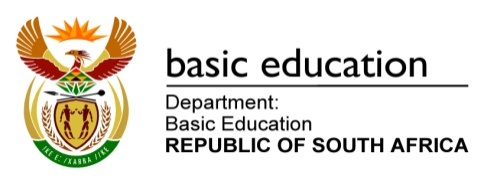
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**JAARLIKSE NASIONALE ASSESSERING 2012**

**GRAAD 6**

**WISKUNDE**

**MODELTOETS 2012 MEMORUNDUM**

****

**JAARLIKSE NASIONALE ASSESSERING 2012**

**GRAAD6 WISKUNDE**

**MODELVRAE TOETS**

**MEMORANDUM**

|  |  |
| --- | --- |
| **Tel aan en telterug in desimale** | |
| 1 | C |
| 2 | C |
| 3. | B |
| 4 | 0,25 ; 0,3 ; 0,35 ; 0,4 ; 0,45  Tel elkekeer 0,05 by |
| 5 | 0,38 |
| 6 | 1,25 ; 1,5 ; 1,75 |
| 7 | 0 0,25 0,5 0,75 1 1,25 1,5 |
| 8 | 5  6  5,6  6,4 |
| 9 | 7 050; 7020; 6990 |
| 10 | 1, 07  1, 08  1, 09  1, 10  1, 11  1, 12 |

**Herkenning, voorstelling, verduideliking en vergelyking van heelgetalle tot ten minste 9-syfers.**

|  |  |
| --- | --- |
| 1 | C |
| 2 | C |
| 3 | 2 385 749 |
| 4. | 5 967 204 ; 19 234 556 |
| 5 | 6 000 000 |
| 6 | 3 567 439 = (3 × 1 000 000) + (5 × 100 000) + (6 × 10 000) + 7 000 + 400 + 39 |
| 7 | 40 000 000 + 2 000 000 + 600 000 + 30 000 + 1000 + 600 + 20 + 7 |
| 8 | 23 150 |
| 9 | 413 123 342 123 212 143 123 243 |
| 10 | Atletiek was die gewildste sport met 2 165 001 toeskouers |
| 11 | (23 450 + 23 500) ÷ 2 = 23 475 |
| 12 | 459 342 109 |
| 13 | Twee honderd en dertigduisendsewehonderd en nege. |

**Plekwaardes**

|  |  |
| --- | --- |
| 1 | C |
| 2 | A |
| 3 | C |
| 4 | B |
| 5. | 20 000 000 |
| 6 | TM of TienMiljoen |
| 7. | 3 315 427 687 of enigegetal |
| 8. | a) 50 000 000 mense  b) 300 000 mense |
| 9. | R40 + R3 + R0, 30 + R0, 06 = R43,36 |

**Herkenveelvoude en faktore van telgetalle.**

|  |  |
| --- | --- |
| 1 | C |
| 2 | B |
| 3 | B |
| 4 | (a) Ja |
|  | (b) Ja |
| 5a | 2048 ; 4096; 8192 |
| 5b | Vermenigvuldigelkegetal met 2. |
| 6 | 49 |
| 7 | 15 |
| 8 | 8 |
| 9 | 1 en 125  5 en 25 |
| 10 | 21; 42; 63 |
| 11. | 36 |
| 12 | 3 en 19 |

**Herkenpriemgetalle tot by ten minste 100.**

|  |  |
| --- | --- |
| 1 | D |
| 2 | 29 en 31 |
| 3. | 101 |
| 4 | 2 |
| 5.1 | 61 |
| 5.2 | 57 |

**Optellingseienskap van 0 en vermenigvuldigingseienskap van 1**

|  |  |
| --- | --- |
| 1 | 578 = 0 + 578 |
| 2 | 47 893 - 0 = 47 893 |
| 3 | 0 + 95 = 95 en 95 – 0 = 95daarom is 0 + 95 = 95 – 0 |
| 4 | Wanneerons 0 bytel, bly die getalonveranderd. |
| 5 | 24 367 x 0 + 1 = 1 |
| 6 | 47 983 x 1 = 47 983 |
| 7 | Waar |

**Herken en gebruikekwivalentegetalleinsluitendgewonebreuke, desimalebreuke en persentasies.**

|  |  |
| --- | --- |
| 1 | C |
| 2 | B |
| 3 | 75% =  25% = 0, 25 |
| 4 |  |
| 5 | 3,8 , 0,38 , 0,375 |
| 6 | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | 1,4 | |  | |  | | **2,6** | | **3** | | **3,4** | |  | |  | | 4,4 | | |  | |  | |  | |  | |  | |  | |  | |  | |  | | |
| 7 |  |
| 8 | =  = |
| 9 |  |
| 10.1 |  |
| 10.2 | 12,5 > |
| 10.3 | 100% = 1 |
| 11.1 | 25% |
| 11.2 | 0,25 |
| 11.3 | Gewonebreuk |
| 12 | = 54% |
| 13 | = =  Hy het 34 uit 50 gekry. |
| 14 |  |
| 15 | Breukdeelvir Lukas = x=  Dus het SAM die meestesjokoladegeëet. |

**Rondaf tot die naaste 5, 10, 100 of 1000.**

|  |  |
| --- | --- |
| 1 | B |
| 2 | D |
| 3 | D |
| 4 | 24 100 |
| 5 | 338 , 339 , 341 , 342 |
| 6 | R46, 40 |

**Optel en aftrek van telgetalle**

|  |  |
| --- | --- |
| 1.1 | Aantalkaartjies = 4  629 592  1 625 407  68 945  2 165 001  + 770 239  4  629 592 |
| 1.2 | Aantalkaartjies = 1 394 762  2 165 001  - 770 239  1 394 762 |
| 2.1 | 3 423 567  766 678  + 2 378 487  6 568 732 |
| 2.2 | 3 032 512  – 1 753 769  1 278 743 |
| 3 | Aantal kinders = 41 295- (23 985+11 378)  =41 295 – 35 363  =5 932 |
| 4. | 6 467 – 2684 = 6 467 – 3 000 + 316 = 3 467 + 316 = 3 783  of   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | 6 | 4 | 6 | 7 |  | | - | 3 | 0 | 0 | 0 |  | |  | 3 | 4 | 6 | 7 | 6 467 – 3 000 = 3 467 | | + |  | 3 | 1 | 6 | 3 000 – 2 684 = 316 | |  | 3 | 7 | 8 | 3 |  | |
| 5 | 1 302 301  - 236 498  1 065 803 |
| 6 | Getal = 1 503 674 - 354 378 =1 149 296 |
| 7 | Aantalskape = 2 957 – 134 + 813 = 3 636   1. 957   - 134  2 823  2 823  + 813  3 636 |

**Optel en aftrek van gewonebreuke**

|  |  |
| --- | --- |
| 1.1 |  |
| 1.2 |  |
| 2.1 | - = - =  = |
| 2.2 |  |
| 3 |  |
| 4 | Aantalleerdersafwesig = x 960  = 3 x (960 ÷ 8)  =3 x 120  =360 |
| 5. | van 480  = 5 x (480 ÷ 12)  = 5 x 40  =200 |
| 6 | van 80 smarties=40  van 120 smarties = 30  Claire sal diehelfte van 80 smartieskies. |
| 7.1 | Inhoudna die reënbui =+=+=  Visdam is  vol. |
| 7.2 | += += =1  Die dam saloorloop want 1 is meer as |

**Vermenigvuldig ‘n 4-syfer getal met ‘n 3-syfer getal**

|  |  |
| --- | --- |
| 1 | Aantallemoene = 2 139 x 428 = 915 492  2 139  X 428  17 112  + 42 780  855 600  915 492 |
| 2 | 7 876  x 393  23 628  708 840  + 2 362  800  3 095 268 |
| 3.1 | Aantalhartkloppe = 78 x 30 = 780 x 3 = 2340 |
| 3.2 | Aantalhartkloppe = 2 x 2 340 = 4680 |
| 4 | Getal = 879 x 536 = 471 144  8 7 9  X 5 3 6  + 5 2 7 4  2 6 3 7 0  4 3 9 5 0 0  4 7 1 1 4 4 |
| 5 | Aantal seuns = 253 + 189 = 442  Totale aantal leerders by die kamp = 2 x 442 = 884 |

**Deel ‘n 4-syfer getal met ‘n 3-syfer getal**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | 5 | 9 | 8 |  | | 4 | 7 | 6 | 2 | 8 | 4 | 6 | 5 | 0 |  | |  |  | - | 2 | 3 | 8 | 0 |  |  |  | |  |  |  | - | 4 | 6 | 6 | 5 |  |  | |  |  |  |  | 4 | 2 | 8 | 4 |  |  | |  |  |  |  | -  - | 3  3 | 8  8 | 1 | 0 |  | |  |  |  | 0 | 8 |  | |  |  |  |  |  |  |  |  | 2 |  |   Res = 2 |
| 2 | Aantalplante = 2 3 5 x 1 7  = 2 3 5 x (10 + 7)  =( 2 3 5 x 10) + (2 3 5 x 7) of langmaal  = 2 3 5 0 + 1 6 4 5  = 3 9 9 5  Aantaltamaties = 3 9 9 5 x 1 1  = 4 3 9 4 5  Aantaltamatieswatverpakkan word = 4 3 9 4 5 – 34  = 4 3 9 1 1  Aantalpakkieswatgelewerkan word = 4 3 9 1 1 ÷ 1 3 = 3 454   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  | 3 | 4 | 5 | 4 |  |  | |  | 1 | 3 | 4 | 3 | 9 | 1 | 1 |  |  | |  |  | - | 3 | 9 |  |  |  |  |  | |  |  |  | - | 4 | 9 |  |  |  |  | |  |  |  |  | 4 | 2 |  |  |  |  | |  |  |  |  |  | 7  6 | 1  5 |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | 6 | 1 |  |  |   5 2  9 |
| 3 | Getal = 123 250 ÷ 125 = 986   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | 9 | 8 | 6 |  | | 1 | 2 | 5 | 1 | 2 | 3 | 2 | 5 | 0 |  | |  |  | - | 1 | 1 | 2 | 5 |  |  |  | |  |  |  | - | 1 | 0 | 7 | 5 |  |  | |  |  |  |  | 1 | 0 | 0 | 0 |  |  | |  |  |  |  |  | - | 7  7 | 5 | 0 |  | |  |  |  | 5 | 0 |  | |  |  |  |  |  |  |  |  |  |  | |
| 4 | 785 ÷ 65 = 12 res 5   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  | 1 | 2 |  |  | |  | 6 | 5 | 7 | 8 | 5 |  |  | |  |  |  | 6 | 5 |  |  |  | |  |  |  | 1 | 3 | 5 |  |  | |  |  |  | 1 | 3 | 0 |  |  | |  |  |  |  |  | 5 |  |  | |  |  |  |  |  |  |  |  |   785 ÷ 65 = 12 rem 5  Aantalbusse = 13 |
| 5 | y = 356 x 369 +4  = 131 364 + 4  = 131 368  3 5 6  X 3 6 9  3 2 0 4  + 2 1 3 6 0  1 0 6 8 0 0  1 3 1 3 6 4 |
| 6 | 10 000 ÷ 20 – 25 × 20  =(10 000 ÷ 20 ) – (25 x 20)  =500 - 500  = 0 |

**Optel en aftrek van desimalebreuke**

**Vermenigvuldigdesimalebreuke met 10 en 100.**

|  |  |
| --- | --- |
| 1 | A |
| 2 | 3,23 + 5, 62 = 8, 85 |
| 3 | 6 – 2,34= 6,00 – 2, 34 = 3, 66 |
| 4 | 2, 4 + 4,2 - \_\_\_\_ = 0,28  6, 6 - \_\_\_\_ = 0,28  6,6 – 6,32 = 0,28 |
| 5 | Waar |

**Herken en gebruikdeelbaarheidsreëlsvir 2, 3, 4, 5, 10, 100, en 1000.**

|  |  |
| --- | --- |
| 1 | B en D |
| 2(a) | Waar |
| 2(b) | Waar |
| 2(c) | Waar |

**Volgorde van bewerkings met telgetalle**

|  |  |
| --- | --- |
| 1 | A |
| 2 | C |
| 3 | C |
| 4.1 | 2 + 3 x 4  =2 + 12  =14 |
| 4.2 | 2 x 4 + 3 x 2  = 8 + 6  = 14 |
| 4.3 | 4 + 8 ÷ 2 - 4  = 4 + 4 -4  = 4 |
| 4.4 | 6 – 10 + 6  = 12 – 10  = 2 |
| 5 | X |
| 6 | 90 |

**Probleemoplossing**

|  |  |
| --- | --- |
| 1.1 | Wins = R5, 50 – R3, 45 = R2, 05 |
| 1.2 | Wins =R2,05 x 67= R 134 + R3, 35= R137, 35 |
| 1.3 | Verlies = (R3,45 – R2,95) x 15 = R0,50 x 15 = R7,50 |
| 2 | Afslag =10% van R250  =  = R25,00  Koste = R250 – R25  = R225  **of**  Afslagprys = 90% van R250  =  = 9 x R25  = R225 |
| 3 | Aantalkinders =  = 259  Aantalvolwassenes = 1 295 – 259  = 1 036 |
| 4 | Afstand = 12,5 x120 km  = 12,5 x 10 x 12 km  = 125 x 12km  =1500km |
| 5 | Inkomste in 7 dae= 8 xR9, 50 x 7  = R76,00 x 7  = R532,00 |
| 6 | $35 = R7, 67 x 35  = R7,67 x 7 x 5  = R53,69 x 5  = R 268, 45 |

**Meetkundige- en getalpatrone**

|  |  |
| --- | --- |
| 1 | B |
| 2 |  |
| 3.1 | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |
| 3.2 | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Diagram nommer | **1** | **2** | **3** | **4** | **8** | ***nhhhh*** | **10** | **23** | | Aantalkleinvierkante | 1 | 4 | 9 | 16 | 64 | *n x n* | 100 | 529 | |
| 3.3 | Tel eenvierkant in elkery en kolom by. |
| 3.4 | Maal die diagramnommer met homself. |
| 4.1 | 29 |
| 4.2 | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 1 | 2 | 4 | 7 | 11 | 16 | 22 | | +1 | +2 | +3 | +4 | +5 | +6 | +7 | |  |  |  |  |  |  |  | | Volgende term is 29 omdat 22 +7 = 29 | | | | | | | | Term 9 = 29 +8 | | | | | | | |  |  |  |  |  |  |  | |
| 5 | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Aantaltafels | 4 | 5 | 6 | 7 | | Aantalmense | 10 | 12 | 14 | 16 | |
| 5.1 | 12 mense |
| 5.2 | 9 tafels |
| 5.3 | (20 – 2) ÷ 2 = 9 |
| 5.4 | 14 tafels want (30 – 2) ÷ 2 = 14 |
| 6 | A= 6 en B= 42 |
| 7.1 | 3; 7; 12; 18; \_25\_\_; \_\_33\_\_; \_\_42\_\_; \_52\_\_. |
| 7.2 | 1; 1; 2; 3; 5; \_\_8\_\_; \_\_13\_\_; \_\_21\_\_; \_\_34\_\_ |
| 8 |  |
| 9 | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Aantalvierkante | 1 | 2 | 3 | 4 | 5 | 10 | 20 | | Aantalvuurhoutjies | 4 | 7 | 10 | 13 | 16 | 31 | 61 | |
| 10 | ∆ = 12 |
| 11 | 36 ÷ 3 - 3 = 9 |
| 12 | Inkomste = R150 x 5 x 6 |
| 13. | ‘nKerk het 27 rye banke en daarkan 23 mense in elkery sit. 15 mensesit op die verhoog. Hoeveelmense is in die kerk as al die sitplekkevol is? |

**2-D vorms en 3-D voorwerpe**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | Reghoek | Agthoek / Oktogoon | Sirkel | Driehoek | |
| 2 | |  |  |  |  | | --- | --- | --- | --- | | Driehoekigeprisma | Silinder | Reghoekigeprisma | Piramide | |
| 3 | * Beide is vierhoeke * Beide het 4 regtehoeke * Teenoorstaandesye is parallel * Teenoorstaandesye is ewe lank |
| 4.1 | Driehoekigeprisma |
| 4.2 | 2 |
| 5 | |  |  |  |  | | --- | --- | --- | --- | |  | Kubus | DriehoekigePrisma | Driehoekigepiramide | | Aantalvlakke | 6 | 5 | 5 | | Vorm(s) van die vlakke | Vierkante | Driehoeke en reghoeke | Driehoeke | | Aantalhoekpunte | 8 | 6 | 5 | | Aantalrande | 12 | 9 | 8 | | Aantalgeboëvlakke | 0 | 0 | 0 | |
| 6 | Hulle is vierhoeke |

**Herken, teken en beskryflyne van simmetrie in 2-Dvorms.**

|  |  |
| --- | --- |
| 1 | 1. 0 |
| 2 |  |
| 3 | B en C |
| 4 |  |

**Transformasies**

|  |  |
| --- | --- |
| 1.1 | Horisontaletranslasie |
| 1.2 | Translasie en refleksie |
| 1.3 | Horisontaletranslasie |
| 1.4 | Rotasie |
|  |  |
| 2 |  |
| 3 |  |
| 4 | Reflekteer |

**Ligging**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1.1 | |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 11 |  |  |  |  |  |  |  |  |  |  |  |  | | 10 |  |  |  |  |  |  |  |  |  |  |  |  | | 9 |  |  |  |  |  |  |  |  |  |  |  |  | | 8 |  |  |  |  |  |  |  |  |  |  |  |  | | 7 |  |  |  |  |  |  |  |  |  |  |  |  | | 6 |  |  |  |  |  |  |  |  |  |  |  |  | | 5 |  |  |  |  |  |  |  |  |  |  |  |  | | 4 |  |  |  |  |  |  |  |  |  |  |  |  | | 3 |  |  |  |  |  |  |  |  |  |  |  |  | | 2 |  |  |  |  |  |  |  |  |  |  |  |  | | 1 |  |  |  |  |  |  |  |  |  |  |  |  | |  | A | B | C | D | E | F | G | H | I | J | K | L | |
| 1.2 | K8 |
| 2 | B |
| 3 | W |
| 4 | 3 |

**Tyd**

|  |  |
| --- | --- |
| 1 | 8 minute oor 10en 10: 08 |
| 2 | Clockface |
| 3 | Nege en veertig minute oortwaalf OF  Elf minute vooreen |
| 4 | |  |  |  | | --- | --- | --- | | **Tyd in woorde** | **24 uurtyd** | **12 uurtyd** | | Seweuur in die aand | 19:00 | 7.00nm. | | Kwartvoortien in die oggend | 09:45 | 9.45 vm. | | Twintigoor twee in die middag | 14:20 | 2.20 nm. | | Kwartoortien in die aand | 22:15 | 10.15 nm. | | middernag | 00:00 | 12.00vm. | |
| 5 | 30 minute |
| 6 | Eenuurveertig minute of 1h 40min. |
| 7 | 07:30 |
| 8 | 5 minute = 300sekondes (5 x 60 = 300)  17 uur = 1 020 minute (17 x 60 = 170 x 6 = 1020)  4 uur = 14 400sekondes (4 x 60 x 60 = 240 x 60 = 14 400)  1 week = 10 080 minute (7 x 24 x 60 = 168 x 60 = 10 080)  2150 jare = 215 dekades |
| 9 | 8 uur 15 minute. |
| 10 | Tydspandeer= 7 x 6 x 45 minute  = 7 x 270 minute  = 7 x 270 ÷ 60 h  = 63 ÷ 2 h  = 31h 30 minute |

**Herleidingstussensi-meeteenhede; los probleme op en doenbewerkingswaarherleidingsnodigis**

|  |  |
| --- | --- |
| 1.1 | 3 ton = 3000*kg* |
| 1.2 | 1*kg* 25*g* = 1,025*kg* |
| 1.3 | 2 l 18*ml* = 2 018*ml* |
| 1.4 | 4 500*ml*  =4,5 *l* |
| 1.5 | 1m 84*cm* = 184 *cm* |
| 2.1 | 100*g* |
| 2.2 | 3,3*kg* = 3300*g* |
| 2.3 | 9*kg* – 3,3*kg* = 5,7*kg* |
| 3 | Aantal liters = x 12  = 9 |
| 4 | Totalemassa = 8 x 600 + 400*g*  =4 800 + 400*g*  =5200*g*  =5,2*kg* |
| 5 | 6cm |
| 6.1 | 1 *l*benodig250 *ml*  1,5 *l*benodig 3 x 250 *ml*  1, 5 *l*benodig 375 *ml* |
| 6.2 | 5 literkoeldrankbenodig 5 x 250 *ml*konsentraat  5 literkoeldrankbenodig1 250 *ml*  5 literkoeldrankbenodig1, 25*l* |
| 7 | 1 vriend drink *l*  45 vriende drink 22 *l*  Jymoet 12 twee-literbottelskoop. |
| 8 | 2 liters |
| 9.1 | 4m : 10m = 4:10 = 2:5 |
| 9.2 | 10m:4m = 10: 4 = 5:2 |
| 9.3 | 2 keer (10 ÷4 = 2 ) |
| d | Breuk = |
| 10 | |  |  | | --- | --- | | 800 *kg* | Hysbak met 78 mense | | 35 ton | Vragmotor | | 500*g* | Handsak | | 35 *kg* | Kruiwa | |
| 11.1 | S |
| 11.2 | R |

**Bereken die oppervlakte van reghoekedeur van ‘n rooster(grid) gebruiktemaak.**

|  |  |
| --- | --- |
| 1.1 | 4 *cm* |
| 1.2 | Omtrek:P= 4*cm* + 4*cm* + 4*cm* +4*cm* (P = 4 x 4*cm*)  = 16 *cm* |
| 1.3 | 3 *cm* |
| 1.4 | P = 3 *cm* +7*cm* + 3*cm* +7*cm*  = 20 *cm* |
| 1.5 | Oppervlakte van die vierkant = 16*cm2* |
| 1.6 | Oppervlakte van die reghoek = 21*cm2* |
| 2. | |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |
| 3 | PQ = x 6*cm* = 9*cm* |
| 4 | http://www.oldschool.com.sg/modpub/4652428144536f6ede9fd |
| 4.1 | 27 blokkies |
| 4.2 | 27 *cm3* |
| 4.3 | 12*cm2* |

**Datahantering**

|  |  |
| --- | --- |
| 1 | 9 |
| 2 |  |
|  | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Gebeurtenisse | **Onmoontlik** | **Onwaarskynlik** | **50% kans** | **Waarskynlik** | **Seker** | | 1. Jy word 2 jaaroud op jouvolgendeverjaarsdag. | ✓ |  |  |  |  | | 1. ‘nMuntstuk word opgeskietomtebepaalwieskopaf in ‘n sokkerwedstryd. BafanaBafana wen en skopeersteaf in hullevolgendewedstryd. |  |  | ✓ |  |  | | 1. ‘nSny brood met botter en konfyt op eenkantval op die grond. Die kant met botter en konfyt op wysboontoe. |  |  | ✓ |  |  | | 1. ‘nDuimspyker word in die lug op gegooi en land met die spykernaonder. | ✓ |  |  |  |  | |
| 3 | Gooi ‘n muntstuk in die lug. |
| 4 | R1 R2 , R1 R5 , R2 R1 , R2 R5 , R5 R1 , R5 R2 |
| 5 | Waarskynlikheid =  = |
| 6 | 6:10 3:5 |
| 7 | |  |  |  | | --- | --- | --- | | **Kleur van kar** | **Telmerkies** | **Frekwensie** | | rooi | ~~////~~ /// | 8 | | Wit | ~~////////~~ // | 12 | | geel | ~~////~~ // | 7 | |
| 8 | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Motorfiets | Kar | Minibus | Bakkie | Vragmotor | | 8 | 12 | 8 | 7 | 5 |   Keuse van voertuig   |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Aantalmense |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | |  |  | Motor-  fiets | | Kar | | Minibus | | Bakkie | | Vragmotor | | |
| 9 | |  |  |  | | --- | --- | --- | | Aantalmense in familie | Telmerkies | Frekwensie | | 1 | ~~////////////~~ | 15 | | 2 | ~~////////~~ / | 11 | | 3 | ~~////////~~ / | 11 | | 4 | ~~////~~ // | 7 | | 5 | /// | 3 | | 6 | // | 2 | | 7 | / | 1 | |
| 10 | Gemiddeld  =(17+23+27+29+30+36) ÷ 6  = 162 ÷ 6  =27 |
| 11 | 72 72 73 74 76 77 78 79 79 79 80  Mediaan=77 |
| 12 | Modus = R4, 40 |
| 13.1 |  |
| 13.2 | 120 ÷ 8 = 15 |