Province of the



**EASTERN CAPE**

EDUCATION

**INTERMEDIÊRE**

**FASE**

**GRAAD 6**

**JUNIE 2010**

|  |
| --- |
| **WISKUNDE** |

**NAAM VAN LEERDER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SKOOL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**DISTRIK: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PUNTE: 50**

**TYD: 1 uur (laat 10 minute ekstra tyd toe)**

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| Hierdie vraestel bestaan uit 9 bladsye. |

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| **INSTRUKSIES EN INLIGTING** | |
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| 1. | Beantwoord al die vrae. |
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| 2. | Skryf netjies en leesbaar. |
|  |  |
| 3. | Moet nie die numering (nommers) verander nie. |
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| 4. | Toon alle bewerkings op jou vraestel, waar nodig. |
|  |  |
| 5. | Moet nie ŉ sakrekenaar gebruik nie. |

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| 1. | Bepaal die waarde van die onderstreepte/vetgedrukte syfer. | | | |  |
|  | 5 4**5**9 365 \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | (1) |
|  |  |  | |  |  |
| 2. | Rond 86 367 af tot die naaste: | | | |  |
|  |  | |  |  |  |
|  | 2.1 | | 1 000 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | (1) |
|  |  | |  |  |  |
|  | 2.2 | | 10 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | (1) |
|  |  | |  |  |  |
| 3. | Vul die ontbreekte desimale breuk in wat aangedui word deur die reghoek: | | | |  |
|  | 2,04 ; 2,08 ; 2,12 ; 2,16; ; 2,24 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | (1) |
|  |  |  | |  |  |
| 4. | Gebruik die stel van 10 syfers (0, 1, 2, 3, 4, 5, 6, 7, 8, 9) sonder om ŉ syfer te herhaal, om die volgende getalle te vorm: | | | |  |
|  |  | |  |  |  |
|  | 4.1 | | Die kleinste 6-syfer getal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | (1) |
|  |  | |  |  |  |
|  | 4.2 | | Die grootste 7-syfer getal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | (1) |
|  |  | |  |  |  |
|  | 4.3 | | Bepaal die verskil tussen die twee getalle hierbo. | |  |
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| 5. | Kyk na die onderstaande figuur en beantwoord die vrae wat daarop volg: | | | |  |
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|  |  | |  |  |  |
|  | 5.1 | | Watter **breuk** van die figuur is ingekleur? | |  |
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|  | 5.2 | | Watter persentasie van die figuur is ingekleur? | | |  |
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|  |  | |  | | | (2) |
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|  | 5.3 | | Herlei die ingekleurde deel na ŉ desimale breuk. | | |  |
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|  |  | |  | | | (1) |
|  |  | |  | | |  |
| 6. | Voltooi: die ekwivalente (gelykwaardige) breuk  = | | | | | (1) |
|  |  | |  | | |  |
| 7. | Die leerders van Progress Primêr het bruin papier nodig om hulle skryfboeke oor te trek. Die bruin papier word in rolle by die skool verkoop. Om die ouers te help besluit hoeveel rolle hulle moet koop, verskaf die skool die volgende inligting: | | | | |  |
|  |  | |  | | |  |
|  | ŉ Graad 4-leerder het omtrent ⅔ van ŉ rol nodig om al sy/haar boeke oor te trek. | | | | |  |
|  | ŉ Graad 5-leerder het omtrent ¾ van ŉ rol nodig om al sy/haar boeke oor te trek. | | | | |  |
|  | ŉ Graad 6-leerder het omtrent 1 rol nodig om al sy/haar boeke oor te trek. | | | | |  |
|  | ŉ Graad 7-leerder het omtrent 1 ½ rolle nodig om al sy/haar boeke oor te trek. | | | | |  |
|  |  | |  | | |  |
|  | Mevrou Zama het ŉ kind in Graad 4, een in Graad 5 en een in Graad 7. Hoeveel rolle bruinpapier moet sy koop? | | | | |  |
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| 8. | | Resepte het ŉ sekere verhouding bestanddele sodat die hoeveelheid voedsel of die getal koekies, terte en beskuite verskillend kan wees sonder om die smaak en tekstuur te verander, bv. die bestanddele vir Maggie se koekresep is: 200 g koekmeelblom, 100 g suiker, 2 eiers, 2 teelepels bakpoeier, ŉ klein bietjie melk. | | | |  |
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|  | | 8.1 | | Skryf die hoeveelheid koekmeelblom wat gebruik sou word as die resep verdriedubbel (3 keer) | |  |
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|  | |  | |  | | (1) |
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|  | | 8.2 | | Herlei die antwoord hierbo na kg. | |  |
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|  | | 8.3 | | Hoeveel suiker sal benodig word as 8 eiers gebruik word? | |  |
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|  | |  | |  | |  |
| 9. | | Die Nylrivier is die langste rivier in die wêreld het ŉ lengte van 6 695 km. Herlei die lengte van die rivier na meters. | | | |  |
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| 10. | | ŉ Teepot kan 6 koppies tee bevat. Die kapasiteit van ŉ koppie is 250 ml. | | | |  |
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|  | | 10.1 | | | Hoeveel milliliters kan die teepot bevat? |  |
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|  | |  | | |  | (1) |
|  | |  | | |  |  |
|  | | 10.2 | | | Hoeveel liters kan die teepot bevat? |  |
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|  | |  | | |  | (1) |
| 11. | | Nomsa se jonger broer was gebore op 10 Maart 2010 om 20:15. Hoe oud was die baba op 14 April 2010 om 8:15 nm. Skryf die ouderdom in: | | | |  |
|  | |  | | |  |  |
|  | | 11.1 | | | weke |  |
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|  | |  | | |  | (1) |
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|  | | 11.2 | | | dae |  |
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|  | |  | | |  | (1) |
|  | |  | | |  |  |
| 12. | | Mnr. Mdlalose verkoop ŉ paar lewendige hoenders. Verlede maand hete hy 512 hoenders verkoop. As hy elke hoender vir R56 verkoop het, hoeveel geld het hy verdien? | | | |  |
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| 13. | Nomsa ontwerp die volgende patrone met vuurhoutjies: | |  |
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|  |  | |  |
|  | **Stap** **1 Stap** **2 Stap 3** | |  |
|  |  |  |  |
|  | 13.1 | Brei die patroon uit deur die 5de stap in te vul: | (1) |
|  |  |  |  |
|  |  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Stap** | **1** | **2** | **3** | **5** | | **Aantal vuurhoutjies** | **6** | **11** | **16** |  | |  |
|  |  |  |  |
|  | 13.2 | Hoeveel vuurhoutjies sal benodig word om stap 15 te ontwerp? |  |
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|  |  |  |  |
|  |  |  | (1) |
|  |  |  |  |
|  | 13.3 | Skryf in jou eie woorde die reël van die patroon. |  |
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|  |  |  | (3) |
|  |  |  |  |
| 14. | Voltooi die vloeidiagram hieronder deur die ontbreekte getalle in te vul: | |  |
|  | 20  2  38    **X7+3**  17 | |  |
|  |  |  | (2) |

|  |  |  |  |
| --- | --- | --- | --- |
| 15. | Voltooi die volgende tabel deur die ontbreekte aantal vlakke, rante en hoekpunte in te vul. | |  |
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|  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Figuur** | **Naam** | **Aantal oppervlakke** | **Aantal hoekpunte** | **Aantal rante** | |  | Reghoekige prisma |  |  | **12** | |  | **Tetraëder**  (driehoekige piramide) | **4** |  |  | | | (4) |
|  |  |  |  |
| 16. | Vergroot die volgende reghoek deur sy dimensies (sye) te verdubbel. | |  |

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|  |  |  | (2) |
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| 1.7 | In die onderstaande figuur, **teken**: | |  |
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|  | 17.1 | sy spieëlbeeld \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | (1) |
|  |  |  |  |
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|  | 17.2 | sy geroteerde beeld teen 90°antikloksgewys \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | (2) |

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| 18. | | Voltooi die tabel van telmerkies hieronder wat die getal leerders by Mvezo en Struben hoërskole aandui. Hulle sal die 2010 FIFA wêreldbeker in verskillende stede dophou: | | | | | | | | | | | | | | |  | |
|  | |  |  | | | | | | | | | | | | | |  | |
|  | | 18.1 | **Stad** | | | | | **Telmerkies** | | | | **Frekwensie** | | | | |  | |
|  | |  | Durban | | | | |  | | | | 24 | | | | |  | |
|  | |  | Kaapstad | | | | | ~~////~~ ~~////~~ ~~////~~ / | | | |  | | | | |  | |
|  | |  | Port Elizabeth | | | | | ~~////~~ ~~////~~ ~~////~~ ~~////~~ ~~////~~ ~~////~~ // | | | | 32 | | | | |  | |
|  | |  | Johannesburg | | | | | ~~////~~ ~~////~~ // | | | | 12 | | | | | (2) | |
|  | |  |  | | | | |  | | | |  | | | | |  | |
|  | | 18.2 | Teken ŉ staafgrafiek van die inligting hierbo op die gegewe geruite papier hieronder: | | | | | | | | | | | | | | (5) | |
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|  | |  | **TOTAAL:** | | | | | | | | | | | | | | **50** | |