



Vak: TOY1 : Toy Exam
ProgRESS-code: TOY1I09
Docent: Jack the Exmatriculator
Opleiding: Informatica

Datum: April 1 2013
Tijd: 00:01 AM
Aantal bladen: 7

Gegevens m.b.t. leermiddelen

Papier	<input type="checkbox"/> Nee	<input checked="" type="checkbox"/> Ja en wel	<input checked="" type="checkbox"/> Kladpapier
			<input type="checkbox"/> Lijntjespapier
			<input type="checkbox"/> Ruitjespapier
Rekenapparaat	<input checked="" type="checkbox"/> Nee	<input type="checkbox"/> Ja	
Diktaten	<input checked="" type="checkbox"/> Nee	<input type="checkbox"/> Ja en wel	
Boeken	<input checked="" type="checkbox"/> Nee	<input type="checkbox"/> Ja en wel	
Andere leermiddelen	<input checked="" type="checkbox"/> Nee	<input type="checkbox"/> Ja en wel	
Tentamenopgaven inleveren	<input type="checkbox"/> Nee	<input checked="" type="checkbox"/> Ja	

Opmerkingen

- Dit tentamen omvat 4 multiple choice vragen waarmee je 20 punten kunt verdienen en 4 open vragen waarmee je 20 punten kunt verdienen. De punten worden opgeteld en genormaliseerd naar een bereik van 1 to 10.
- Vul bij het invullen van het antwoordblad de hokjes volledig met zacht zwart potlood of zwarte viltstift. Dus zo: en niet zo: . Schrijf bij het invullen van de open vragen op het antwoordblad niet over de hokjes van de andere antwoorden.
- Bij sommige vragen zijn 1 of meer antwoorden mogelijk. Deze opgaven zijn gemerkt met een ♣. Waar het ♣ ontbreekt is maar één antwoord correct.
- **Tip:** Het examen heeft een los antwoordblad. Schrijf je voorlopige antwoorden op het examenpapier of kladpapier. Zodra je tevreden bent met je antwoorden kopieer je deze naar het losse antwoordblad. Zorg er voor dat het antwoordblad niet gekreukt of vuil raakt.
- **Al het ontvangen papier compleet inleveren. Niet ingeleverde papieren betekent geen cijfer. Je vragenset is op naam gesteld en identificeerbaar!**

Naam student: Karel Kandidaat

Studentnummer: 9199901
Klas: TIPA/TIPB/TIPC

**Vraag 1:**

Let X and Y be two independent random variables, following the exponential distribution with respective parameters 2 and 10. To which interval does the probability $\mathbb{P}[X < Y]$ belong?

- | | | | | |
|----------------|----------------|----------------|----------------|----------------|
| (A) [0, 0.1) | (C) [0.2, 0.3) | (E) [0.4, 0.5) | (G) [0.6, 0.7) | (I) [0.8, 0.9) |
| (B) [0.1, 0.2) | (D) [0.3, 0.4) | (F) [0.5, 0.6) | (H) [0.7, 0.8) | (J) [0.9, 1) |

Vraag 2:♦ In welke provincie ligt Dronten?

- | | | |
|-----------------------|-------------------|---|
| (A) Drenthe | (F) Noord Holland | (K) Limburg |
| (B) Noord Brabant | (G) Groningen | (L) Zuid Holland |
| (C) Utrecht | (H) Overijssel | |
| (D) Flevoland | (I) Gelderland | (M) <i>Geen van de antwoorden is juist.</i> |
| (E) Zeeuws Vlaanderen | (J) Luik | |

Vraag 3:♣ Welke (delen van) provincie namen kunnen zowel in België als in Nederland gevonden worden?

- (A) Luxemburg
(B) Vlaanderen
(C) Limburg
(D) Brabant
(E) Holland
(F) *Geen van de antwoorden is juist.*

Vraag 4:♣ In welke provincie ligt Elst?

- | | | |
|-------------------|-----------------------|---|
| (A) Flevoland | (F) Gelderland | (K) Groningen |
| (B) Limburg | (G) Overijssel | (L) Drenthe |
| (C) Utrecht | (H) Luik | |
| (D) Zuid Holland | (I) Zeeuws Vlaanderen | (M) <i>Geen van de antwoorden is juist.</i> |
| (E) Noord Brabant | (J) Noord Holland | |

Vraag 5: Welk van de Benelux heeft als hoofdstad een stad met dezelfde naam als het land?

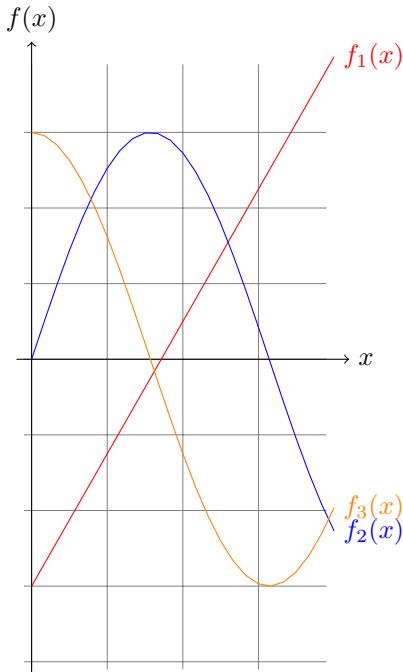
- (A) Limburg (B) Lichtenstein (C) Namur (D) Bruxelles (E) Luxemburg

Vraag 6:♦ In welke provincie ligt Oirschot?

- | | | |
|-------------------|-------------------|---|
| (A) Gelderland | (F) Zuid Holland | (K) Groningen |
| (B) Flevoland | (G) Overijssel | (L) Zeeuws Vlaanderen |
| (C) Drenthe | (H) Noord Holland | |
| (D) Utrecht | (I) Limburg | (M) <i>Geen van de antwoorden is juist.</i> |
| (E) Noord Brabant | (J) Luik | |



Vraag 7: Let us consider the three functions which graphs are plotted below:



Then:

- (A) $f_2(3)=0.42$.
- (B) $f_3(3)=-2.97$.
- (C) La fonction $f_1(x)$ est une fonction linéaire.
- (D) *Geen van de antwoorden is juist.*

Vraag 8: In welke provincie ligt Venlo?

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> (A) Flevoland (B) Groningen (C) Zuid Holland (D) Luik (E) Limburg | <ul style="list-style-type: none"> (F) Overijssel (G) Gelderland (H) Utrecht (I) Drenthe (J) Noord Brabant | <ul style="list-style-type: none"> (K) Zeeuws Vlaanderen (L) Noord Holland (M) <i>Geen van de antwoorden is juist.</i> |
|---|---|---|

Vraag 9:

Welke land ligt ten noorden van Italië, ten westen van Oostenrijk, ten zuiden van Duitsland en ten oosten van Frankrijk en heeft een contour zoals in figuur 1?

- (A) Oostenrijk
- (B) Liechtenstein
- (C) Monaco
- (D) Zwitserland



Figuur 1: Outline of European country



Vraag 10: In welke provincie ligt Delfzijl?

- | | | |
|---|-------------------|-------------|
| (A) Noord Brabant | (F) Groningen | (K) Utrecht |
| (B) Overijssel | (G) Gelderland | (L) Drenthe |
| (C) Zeeuws Vlaanderen | (H) Noord Holland | |
| (D) Limburg | (I) Flevoland | |
| (E) Zuid Holland | (J) Luik | |
| (M) <i>Geen van de antwoorden is juist.</i> | | |

Vraag 11: How much is the reciprocal of $x = 23.00000$?

- (A) 0.04347
- (B) 4.79550
- (C) 0.04166
- (D) 0.92050

Vraag 12:

How much is the reciprocal of $x = 36$?

- (A) 0.80902
- (B) 0.02702
- (C) 5.99974
- (D) 0.02777

Vraag 13: Welke van de onderstaande klassen is/zijn Thread Safe?

Listing 1: Sequence

```
import net.jcip.annotations.←  
NotThreadSafe;  
(A) @NotThreadSafe  
public class Sequence {  
    private int value=0;  
  
    public synchronized int getNext(){  
        return value++;  
    }  
}
```

Listing 2: Sequence

```
import net.jcip.annotations.ThreadSafe;  
@ThreadSafe  
(B) public class Sequence {  
    private int value=0;  
  
    public int getNext(){  
        return value++;  
    }  
}
```

Listing 3: Sequence

```
public class Sequence {  
    private int value=0;  
(C)    public int getNext(){  
        synchronized (this) {  
            return value++;  
        }  
    }  
}
```

Listing 4: Sequence

```
import net.jcip.annotations.GuardedBy;  
import net.jcip.annotations.ThreadSafe;  
@ThreadSafe  
(D) public class Sequence {  
    @GuardedBy("this")  
    private int value=0;  
  
    public int getNext(){  
        return value++;  
    }  
}
```

(E) *Geen van de antwoorden is juist.*

Vraag 14: In what city of the Netherlands is the government seated?

Schrijf het antwoord op het antwoordblad.



Vraag 15:

Welk land ligt ten noorden van Duitsland, westelijk van Litouwen, zuidelijk van Noorwegen en oostelijk van Engeland en heeft een contour als in figuur 2.

- (A) Sweden
- (B) The Netherlands
- (C) Denmark
- (D) Finland



Figuur 2: Outline of European country

Vraag 16: Hoe heeft de hoofdstad van Nederland?

Schrijf het antwoord op het antwoordblad.

Vraag 17: In welke provincie ligt Hoogeveen?

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> (A) Noord Holland (B) Groningen (C) Drenthe (D) Zeeuws Vlaanderen (E) Luik | <ul style="list-style-type: none"> (F) Gelderland (G) Flevoland (H) Zuid Holland (I) Overijssel (J) Limburg | <ul style="list-style-type: none"> (K) Noord Brabant (L) Utrecht (M) <i>Geen van de antwoorden is juist.</i> |
|--|--|---|

Vraag 18: In welke provincie ligt Aalst?

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> (A) Zeeuws Vlaanderen (B) Overijssel (C) Luik (D) Gelderland (E) Drenthe | <ul style="list-style-type: none"> (F) Limburg (G) Noord Brabant (H) Groningen (I) Utrecht (J) Flevoland | <ul style="list-style-type: none"> (K) Noord Holland (L) Zuid Holland (M) <i>Geen van de antwoorden is juist.</i> |
|--|---|--|

Vraag 19: In welke provincie ligt Alkmaar?

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> (A) Overijssel (B) Zeeuws Vlaanderen (C) Gelderland (D) Noord Brabant (E) Luik | <ul style="list-style-type: none"> (F) Groningen (G) Drenthe (H) Limburg (I) Noord Holland (J) Flevoland | <ul style="list-style-type: none"> (K) Zuid Holland (L) Utrecht (M) <i>Geen van de antwoorden is juist.</i> |
|--|---|--|

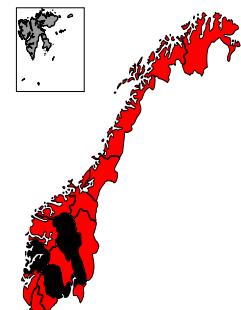
Vraag 20: What is the capital of the Norway?

Schrijf het antwoord op het antwoordblad.

Vraag 21:

Which country lies north of Denmark, west of Sweden, east of England, is famous for its *ffjords* and has an outline like in figure 3.

- (A) Norway
- (B) Sweden
- (C) Finland
- (D) Denmark



Figuur 3: Outline of European country



Vraag 22: In welke provincie ligt Deventer?

- | | | |
|-----------------------|------------------|---|
| (A) Luik | (F) Zuid Holland | (K) Noord Holland |
| (B) Overijssel | (G) Gelderland | (L) Groningen |
| (C) Noord Brabant | (H) Limburg | (M) <i>Geen van de antwoorden is juist.</i> |
| (D) Utrecht | (I) Flevoland | |
| (E) Zeeuws Vlaanderen | (J) Drenthe | |

Vraag 23: Compute $\sqrt{17}$ and round it with two digits after period.

Please code the answer on the separate answer sheet.

Vraag 24:

Which country lies north of Belgium, west of Germany, south of Sweden and east of England and has an outline like in figure 4?

- (A) Denmark
- (B) Scotland
- (C) The Netherlands
- (D) Luxemburg



Figuur 4: Outline of European country

Vraag 25:

What is the sum of 45 and 24 ?

- (A) 1080
- (B) 21
- (C) 69
- (D) 68

Vraag 26: In welke provincie ligt Cadzand?

- | | | |
|-----------------------|-------------------|---|
| (A) Groningen | (F) Limburg | (K) Luik |
| (B) Gelderland | (G) Utrecht | (L) Flevoland |
| (C) Zeeuws Vlaanderen | (H) Zuid Holland | (M) <i>Geen van de antwoorden is juist.</i> |
| (D) Drenthe | (I) Noord Holland | |
| (E) Overijssel | (J) Noord Brabant | |

Vraag 27:

Welk continentaal europees land ligt met mest westelijk en heeft een vorm als in figuur 5.

- (A) Portugal
- (B) Ireland
- (C) Greece
- (D) Scotland



Figuur 5: Outline of European country



Vraag 28: In welke provincie ligt Drachten?

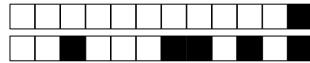
- | | | |
|-----------------------|------------------|---|
| (A) Overijssel | (F) Utrecht | (K) Drenthe |
| (B) Luik | (G) Gelderland | (L) Limburg |
| (C) Noord Holland | (H) Zuid Holland | |
| (D) Zeeuws Vlaanderen | (I) Flevoland | |
| (E) Noord Brabant | (J) Groningen | (M) <i>Geen van de antwoorden is juist.</i> |

Vraag 29: In welke provincie ligt Delft?

- | | | |
|-----------------------|-------------------|---|
| (A) Drenthe | (F) Utrecht | (K) Luik |
| (B) Flevoland | (G) Gelderland | (L) Zuid Holland |
| (C) Noord Holland | (H) Limburg | |
| (D) Overijssel | (I) Noord Brabant | |
| (E) Zeeuws Vlaanderen | (J) Groningen | (M) <i>Geen van de antwoorden is juist.</i> |

Vraag 30: Wat is de hoofdstad van Denmerken?

Schrijf het antwoord op het antwoordblad.



Name: **Kandidaat, Karel**

student number **9199901**

Vraag 1: A B C D E F G H I J

Vraag 2: A B C D E F G H I J K L M

Vraag 3: A B C D E

Vraag 4: A B C D E F G H I J K L M

Vraag 5: A B C D E

Vraag 6: A B C D E F G H I J K L M

Vraag 7: A B C D

Vraag 8: A B C D E F G H I J K L M

Vraag 9: A B C D

Vraag 10: A B C D E F G H I J K L M

Vraag 11: A B C D

Vraag 12: A B C D

Vraag 13: A B C D E

Vraag 14: eu4 W C

Vraag 15: A B C D

Vraag 16: eu3 W C

Vraag 17: A B C D E F G H I J K L M

Vraag 18: A B C D E F G H I J K L M

Vraag 19: A B C D E F G H I J K L M

Vraag 20: eu1 W C

Vraag 21: A B C D

Vraag 22: A B C D E F G H I J K L M

Vraag 23:

	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9
.	.
○+	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9
○-	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9

Vraag 24: A B C D

Vraag 25: A B C D

Vraag 26: A B C D E F G H I J K L M

Vraag 27: A B C D

Vraag 28: A B C D E F G H I J K L M

Vraag 29: A B C D E F G H I J K L M

Vraag 30: eu2 W C



Hogeschool voor Techniek en Logistiek Software Engineering/Wirtschaftsinformatik Exam

Fach: TOY1 : Toy Exam
 ProgRESS-code: TOY11I09
 Dozent: Jack the Exmatriculator
 Studiengang: Informatik

Datum: April 1 2013
 Zeit: 00:01 AM
 Seitenzahl: 7

Erlaubte Lehrmittel

Papier	<input type="checkbox"/> Nein	<input checked="" type="checkbox"/> Ja und zwar	<input checked="" type="checkbox"/> Schmierpapier
			<input type="checkbox"/> liniertes Papier
			<input type="checkbox"/> kariertes Papier
Taschenrechner	<input checked="" type="checkbox"/> Nein	<input type="checkbox"/> Ja	
Skripte	<input checked="" type="checkbox"/> Nein	<input type="checkbox"/> Ja und zwar	
Bücher	<input checked="" type="checkbox"/> Nein	<input type="checkbox"/> Ja und zwar	
Sonstige Lehrmittel	<input checked="" type="checkbox"/> Nein	<input type="checkbox"/> Ja und zwar	
Klausurbogen einliefern	<input type="checkbox"/> Nein	<input checked="" type="checkbox"/> Ja	

Bemerkungen

- Diese Klausur enthält 4 Multiple-Choice Aufgaben, mit denen man 20 Punkte verdienen kann, und 4 offene Fragen, mit denen 20 Punkte verdient werden können. Die Punkte werden addiert und auf einen Bereich von 1 bis 10 normalisiert.
- Beim Ausfüllen des Antwortblatts die Kästchen vollständig mit Bleistift oder Filzschreiber ausfüllen. Also so: und nicht so: .

Schreiben Sie beim Eintragen der offenen Fragen auf dem Antwortblatt nicht über die Kästchen der anderen Antworten.

- Bei manchen Fragen sind eine oder mehrere Antworten möglich. Solche Fragen sind mit einem ♣ gekennzeichnet. Wo das ♣ fehlt ist nur eine Antwort richtig.
- **Hinweis:** Diese Klausur erhält ein separates Antwortblatt. Schreiben Sie Ihre vorläufigen Antworten zunächst auf die Klausurbögen. Wenn Sie dann mit Ihren Antworten zufrieden sind, übertragen Sie diese auf das Antwortblatt. Bitte knittern oder verschmutzen Sie dieses Blatt nicht.
- **Bitte alle erhaltenen Papiere komplett abgeben. Nicht abgebene Papiere bedeutet keine Note. Der Fragebogen ist personifiziert und identifizierbar!**

Name Student: Kurt Kandidat

Studentnummer: 9199909
 Klasse: TIPA/TIPB/TIPC



Frage 1:

Which country lies north of Denmark, west of Sweden, east of England, is famous for its *ffjords* and has an outline like in figure 1.

- (A) Denmark
- (B) Norway
- (C) Finland
- (D) Sweden

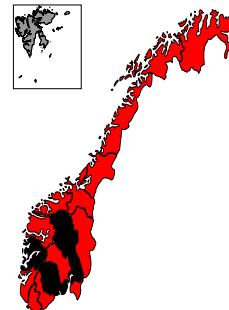


Abbildung 1: Outline of European country

Frage 2:

Welches Land liegt nördlich von Deutschland, westlich von Litauen, südlich von Norwegen und östlich von England und hat ein Umriss wie in Abb. 2.

- (A) Denmark
- (B) Sweden
- (C) The Netherlands
- (D) Finland



Abbildung 2: Outline of European country

Frage 3: In welcher Provinz liegt Drachten?

- | | | |
|-------------------|-----------------------|--------------------------------------|
| (A) Groningen | (F) Noord Holland | (K) Flevoland |
| (B) Gelderland | (G) Limburg | (L) Utrecht |
| (C) Noord Brabant | (H) Zeeuws Vlaanderen | (M) Keine der Antworten ist richtig. |
| (D) Overijssel | (I) Drenthe | |
| (E) Zuid Holland | (J) Luik | |

Frage 4: In welcher Provinz liegt Alkmaar?

- | | | |
|-----------------------|-------------------|--------------------------------------|
| (A) Drenthe | (F) Limburg | (K) Overijssel |
| (B) Utrecht | (G) Flevoland | (L) Luik |
| (C) Zeeuws Vlaanderen | (H) Groningen | (M) Keine der Antworten ist richtig. |
| (D) Gelderland | (I) Noord Holland | |
| (E) Zuid Holland | (J) Noord Brabant | |

Frage 5: In welcher Provinz liegt Aalst?

- | | | |
|-----------------------|-------------------|--------------------------------------|
| (A) Utrecht | (F) Zuid Holland | (K) Limburg |
| (B) Gelderland | (G) Groningen | (L) Overijssel |
| (C) Zeeuws Vlaanderen | (H) Luik | (M) Keine der Antworten ist richtig. |
| (D) Flevoland | (I) Noord Holland | |
| (E) Drenthe | (J) Noord Brabant | |



Frage 6:

What is the sum of 6 and 16 ?

- (A) -10 (B) 21 (C) 22 (D) 96

Frage 7: Wie heißt die Haubstadt der Niederlande?

Schreiben Sie die Antwort auf das separate Antwortblatt.

Frage 8: In welcher Provinz liegt Venlo?

- | | | |
|-----------------------|-------------------|--------------------------------------|
| (A) Luik | (F) Gelderland | (K) Noord Brabant |
| (B) Drenthe | (G) Flevoland | (L) Limburg |
| (C) Zeeuws Vlaanderen | (H) Utrecht | (M) Keine der Antworten ist richtig. |
| (D) Zuid Holland | (I) Groningen | |
| (E) Overijssel | (J) Noord Holland | |

Frage 9: In welcher Provinz liegt Elst?

- | | | |
|-------------------|-------------------|--------------------------------------|
| (A) Drenthe | (F) Utrecht | (K) Limburg |
| (B) Gelderland | (G) Luik | (L) Zeeuws Vlaanderen |
| (C) Noord Holland | (H) Overijssel | (M) Keine der Antworten ist richtig. |
| (D) Flevoland | (I) Noord Brabant | |
| (E) Zuid Holland | (J) Groningen | |

Frage 10: In welcher Provinz liegt Delfzijl?

- | | | |
|-------------------|-----------------------|--------------------------------------|
| (A) Noord Brabant | (F) Luik | (K) Zuid Holland |
| (B) Flevoland | (G) Overijssel | (L) Utrecht |
| (C) Noord Holland | (H) Drenthe | (M) Keine der Antworten ist richtig. |
| (D) Groningen | (I) Gelderland | |
| (E) Limburg | (J) Zeeuws Vlaanderen | |

Frage 11:

Which country lies north of Belgium, west of Germany, south of Sweden and east of England and has an outline like in figure 3?

- (A) Denmark
- (B) The Netherlands
- (C) Luxemburg
- (D) Scotland



Abbildung 3: Outline of European country

Frage 12: How much is the reciprocal of $x = 23.00000$?

- (A) 0.92050
- (B) 4.79550
- (C) 0.04347
- (D) 0.04166



Frage 13: Welche der untenstehende Klassen ist/sind **Thread Safe**?

Listing 1: Sequence

```
import net.jcip.annotations.GuardedBy;
import net.jcip.annotations.ThreadSafe;
@ThreadSafe
(A) public class Sequence {
    @GuardedBy("this")
    private int value=0;

    public int getNext(){
        return value++;
    }
}
```

Listing 2: Sequence

```
import net.jcip.annotations.↳
NotThreadSafe;
(B) @NotThreadSafe
public class Sequence {
    private int value=0;

    public synchronized int getNext(){
        return value++;
    }
}
```

Listing 3: Sequence

```
public class Sequence {
    private int value=0;
(C)    public int getNext(){
        synchronized (this) {
            return value++;
        }
    }
}
```

Listing 4: Sequence

```
import net.jcip.annotations.ThreadSafe;
@ThreadSafe
(D) public class Sequence {
    private int value=0;

    public int getNext(){
        return value++;
    }
}
```

(E) Keine der Antworten ist richtig.

Frage 14: Welche (Teilen von) Provinznamen können sowohl in Belgien als auch in den Niederlanden gefunden werden?

- (A) Vlaanderen
- (B) Brabant
- (C) Limburg
- (D) Holland
- (E) Luxemburg
- (F) Keine der Antworten ist richtig.

Frage 15: What is the capital of the Norway?

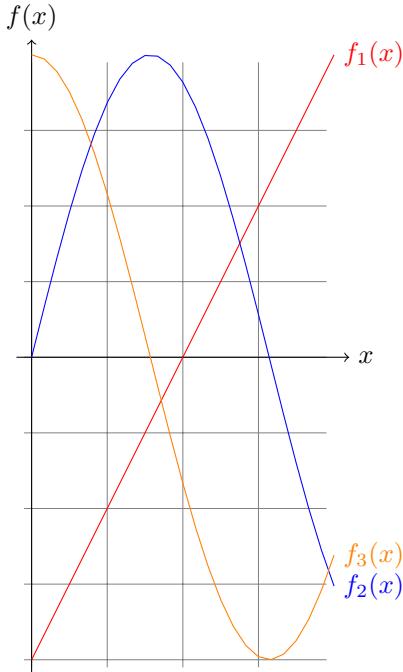
Schreiben Sie die Antwort auf das separate Antwortblatt.

Frage 16: In welcher Provinz liegt Oirschot?

- | | | |
|--------------------------------------|-------------------|-------------------|
| (A) Zeeuws Vlaanderen | (F) Groningen | (K) Noord Brabant |
| (B) Luik | (G) Limburg | (L) Overijssel |
| (C) Utrecht | (H) Noord Holland | |
| (D) Drenthe | (I) Gelderland | |
| (E) Zuid Holland | (J) Flevoland | |
| (M) Keine der Antworten ist richtig. | | |



Frage 17: Let us consider the three functions which graphs are plotted below:



Then:

- (A) La fonction $f_1(x)$ est une fonction linéaire.
- (B) $f_2(2)=3.64$.
- (C) $f_3(2)=-1.66$.
- (D) Keine der Antworten ist richtig.

Frage 18: In what city of the Netherlands is the government seated?
Schreiben Sie die Antwort auf das separate Antwortblatt.

Frage 19:

How much is the reciprocal of $x = 24$?

- (A) 0.91354
- (B) 4.89868
- (C) 0.04166
- (D) 0.04

Frage 20:

Which country lies north of Italy, west of Austria, south of Germany and east of France and has a border shape like in Abbildung 4?

- (A) Liechtenstein
- (B) Monaco
- (C) Österreich
- (D) Die Schweiz



Abbildung 4: Outline of European country

Frage 21: What is the capital of Denmark?

Schreiben Sie die Antwort auf das separate Antwortblatt.



Frage 22: In welcher Provinz liegt Hoogeveen?

- | | | |
|-----------------------|-------------------|--------------------------------------|
| (A) Zeeuws Vlaanderen | (F) Noord Brabant | (K) Overijssel |
| (B) Zuid Holland | (G) Gelderland | (L) Flevoland |
| (C) Drenthe | (H) Noord Holland | (M) Keine der Antworten ist richtig. |
| (D) Utrecht | (I) Groningen | |
| (E) Luik | (J) Limburg | |

Frage 23: In welcher Provinz liegt Delft?

- | | | |
|-------------------|-----------------------|--------------------------------------|
| (A) Overijssel | (F) Utrecht | (K) Groningen |
| (B) Flevoland | (G) Drenthe | (L) Luik |
| (C) Noord Holland | (H) Zeeuws Vlaanderen | (M) Keine der Antworten ist richtig. |
| (D) Zuid Holland | (I) Limburg | |
| (E) Gelderland | (J) Noord Brabant | |

Frage 24: Compute $\sqrt{6}$ and round it with two digits after period.

Please code the answer on the separate answer sheet.

Frage 25: In welcher Provinz liegt Dronten?

- | | | |
|-------------------|-----------------------|--------------------------------------|
| (A) Noord Holland | (F) Utrecht | (K) Drenthe |
| (B) Zuid Holland | (G) Zeeuws Vlaanderen | (L) Flevoland |
| (C) Gelderland | (H) Noord Brabant | (M) Keine der Antworten ist richtig. |
| (D) Groningen | (I) Luik | |
| (E) Limburg | (J) Overijssel | |

Frage 26:

Which continental European country is west-most and has an outline like in figure 5.

- (A) Scotland
- (B) Portugal
- (C) Ireland
- (D) Greece



Abbildung 5: Outline of European country

Frage 27: Welches Land der Benelux hat als Haubstadt eine Stadt mit gleicher Name wie das Land?

- (A) Limburg
- (B) Bruxelles
- (C) Luxemburg
- (D) Lichtenstein
- (E) Namur



Frage 28:♣ In welcher Provinz liegt Deventer?

- | | | |
|---------------------|-----------------|------------------------------------|
| Ⓐ Overijssel | Ⓕ Utrecht | Ⓚ Flevoland |
| Ⓑ Gelderland | Ⓖ Noord Brabant | Ⓛ Noord Holland |
| Ⓒ Zuid Holland | Ⓗ Groningen | |
| Ⓓ Drenthe | Ⓘ Luik | |
| Ⓔ Zeeuws Vlaanderen | Ⓘ Limburg | Ⓜ Keine der Antworten ist richtig. |

Frage 29:♣ In welcher Provinz liegt Cadzand?

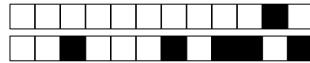
- | | | |
|-----------------|---------------------|------------------------------------|
| Ⓐ Utrecht | Ⓕ Noord Holland | Ⓚ Limburg |
| Ⓑ Gelderland | Ⓖ Zuid Holland | Ⓛ Overijssel |
| Ⓒ Noord Brabant | Ⓗ Luik | |
| Ⓓ Groningen | Ⓘ Flevoland | |
| Ⓔ Drenthe | Ⓘ Zeeuws Vlaanderen | Ⓜ Keine der Antworten ist richtig. |

Frage 30:

Let X and Y be two independent random variables, following the exponential distribution with respective parameters 2 and 9. To which interval does the probability $\mathbb{P}[X < Y]$ belong ?

- | | | | | |
|--------------|--------------|--------------|--------------|--------------|
| Ⓐ [0, 0.1) | Ⓒ [0.2, 0.3) | Ⓔ [0.4, 0.5) | Ⓖ [0.6, 0.7) | Ⓣ [0.8, 0.9) |
| Ⓑ [0.1, 0.2) | Ⓓ [0.3, 0.4) | Ⓕ [0.5, 0.6) | Ⓗ [0.7, 0.8) | Ⓤ [0.9, 1) |

Answer sheet TOY11I09 Datum April 1 2013



+2 / 8 / 45 +

Name: **Kandidat, Kurt**

student number **9199909**

Frage 1: A B C D

Frage 2: A B C D

Frage 3: A B C D E F G H I J K L M

Frage 4: A B C D E F G H I J K L M

Frage 5: A B C D E F G H I J K L M

Frage 6: A B C D

Frage 7: eu3 W C

Frage 8: A B C D E F G H I J K L M

Frage 9: A B C D E F G H I J K L M

Frage 10: A B C D E F G H I J K L M

Frage 11: A B C D

Frage 12: A B C D

Frage 13: A B C D E

Frage 14: A B C D E F

Frage 15: eu1 W C

Frage 16: A B C D E F G H I J K L M

Frage 17: A B C D

Frage 18: eu4 W C

Frage 19: A B C D

Frage 20: A B C D

Frage 21: eu2 W C

Frage 22: A B C D E F G H I J K L M

Frage 23: A B C D E F G H I J K L M

Frage 24:

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.	.
0+	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9
0-	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9

Frage 25: A B C D E F G H I J K L M

Frage 26: A B C D

Frage 27: A B C D E

Frage 28: A B C D E F G H I J K L M

Frage 29: A B C D E F G H I J K L M

Frage 30: A B C D E F G H I J



Module: TOY1 : Toy Exam
ProgRESS-code: TOY11I09
Teacher: Jack the Exmatriculator
Course: Informatica

Date: April 1 2013
Time: 00:01 AM
Page count: 7

Information w.r.t. materials

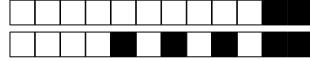
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			<input type="checkbox"/> squared paper
Calculator	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
Syllabi	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes and	
Books	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes and	
Other study materials	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes and	
Hand in Exam questions	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	

Remarks

- This exam has 4 multiple choice questions earning a maximum of 20 points and 4 open questions earning a maximum of 20 points. The points are summed and normalised to a range of 1 to 10.
- Completely fill out the black boxes with a black pencil or felt tip. Thus like this: and *not* like: . When writing the answers to the open questions to the answer sheet, please stay clear of the other boxes.
- With some questions one ore more answers apply. Such questions are marked with a . Where the 

Name Student: Charles Candidate

Student number: **9199910**
Class: TIPA/TIPB/TIPC



Quest. 1: In which province lies Aalst?

- | | | |
|-----------------------|------------------|--|
| (A) Noord Holland | (F) Drenthe | (K) Noord Brabant |
| (B) Gelderland | (G) Zuid Holland | (L) Luik |
| (C) Flevoland | (H) Utrecht | (M) <i>None of these answers is correct.</i> |
| (D) Limburg | (I) Groningen | |
| (E) Zeeuws Vlaanderen | (J) Overijssel | |

Quest. 2: In which province lies Delft?

- | | | |
|-------------------|-----------------------|--|
| (A) Noord Holland | (F) Flevoland | (K) Zuid Holland |
| (B) Overijssel | (G) Zeeuws Vlaanderen | (L) Utrecht |
| (C) Groningen | (H) Drenthe | (M) <i>None of these answers is correct.</i> |
| (D) Luik | (I) Limburg | |
| (E) Noord Brabant | (J) Gelderland | |

Quest. 3: How much is the reciprocal of $x = 14.00000$?

- (A) 0.07143
- (B) 3.74127
- (C) 0.97030
- (D) 0.06667

Quest. 4: Which country of the benelux has a capital named the same as the country?

- (A) Namur
- (B) Lichtenstein
- (C) Luxemburg
- (D) Bruxelles
- (E) Limburg

Quest. 5:

Which country lies north of Italy, west of Austria, south of Germany and east of France and has the shape like in figure 1?

- (A) Austria
- (B) Monaco
- (C) Switzerland
- (D) Liechtenstein



Figure 1: Outline of European country

Quest. 6:

Which country lies north of Belgium, west of Germany, south of Sweden and east of England and has an outline like in figure 2?

- (A) The Netherlands
- (B) Denmark
- (C) Scotland
- (D) Luxemburg



Figure 2: Outline of European country

**Quest. 7:**

How much is the reciprocal of $x = 1$?

- (A) 1.0
- (B) 0.99985
- (C) 0.5
- (D) 1.0

Quest. 8: What is the capital of the Denmark?

Please write the answer on the separate answer sheet.

Quest. 9:♣ In which province lies Deventer?

- | | | |
|---|--|---|
| <ul style="list-style-type: none">(A) Utrecht(B) Luik(C) Zuid Holland(D) Flevoland(E) Zeeuws Vlaanderen | <ul style="list-style-type: none">(F) Drenthe(G) Groningen(H) Limburg(I) Noord Brabant(J) Gelderland | <ul style="list-style-type: none">(K) Overijssel(L) Noord Holland(M) <i>None of these answers is correct.</i> |
|---|--|---|

Quest. 10:♣ Which (partial) province name(s) can be found in both in Belgium and the Netherlands?

- (A) Luxemburg
- (B) Limburg
- (C) Brabant
- (D) Vlaanderen
- (E) Holland
- (F) *None of these answers is correct.*

Quest. 11:♣ In which province lies Alkmaar?

- | | | |
|--|--|--|
| <ul style="list-style-type: none">(A) Flevoland(B) Noord Brabant(C) Gelderland(D) Zuid Holland(E) Luik | <ul style="list-style-type: none">(F) Overijssel(G) Zeeuws Vlaanderen(H) Limburg(I) Groningen(J) Drenthe | <ul style="list-style-type: none">(K) Noord Holland(L) Utrecht(M) <i>None of these answers is correct.</i> |
|--|--|--|



Quest. 12: Which of the classes below is/are Thread Safe?

Listing 1: Sequence

```
import net.jcip.annotations.GuardedBy;
import net.jcip.annotations.ThreadSafe;
@ThreadSafe
(A) public class Sequence {
    @GuardedBy("this")
    private int value=0;

    public int getNext(){
        return value++;
    }
}
```

Listing 2: Sequence

```
import net.jcip.annotations.ThreadSafe;
@ThreadSafe
(B) public class Sequence {
    private int value=0;

    public int getNext(){
        return value++;
    }
}
```

Listing 3: Sequence

```
C) public class Sequence {
    private int value=0;

    public int getNext(){
        synchronized (this) {
            return value++;
        }
    }
}
```

Listing 4: Sequence

```
import net.jcip.annotations.NotThreadSafe;
@NotThreadSafe
(D) public class Sequence {
    private int value=0;

    public synchronized int getNext(){
        return value++;
    }
}
```

(E) None of these answers is correct.

Quest. 13: In which province lies Oirschot?

- (A) Utrecht
- (B) Drenthe
- (C) Zuid Holland
- (D) Noord Brabant
- (E) Gelderland

- (F) Zeeuws Vlaanderen
- (G) Noord Holland
- (H) Flevoland
- (I) Luik
- (J) Limburg

- (K) Overijssel
- (L) Groningen
- (M) None of these answers is correct.

Quest. 14: In which province lies Delfzijl?

- (A) Utrecht
- (B) Limburg
- (C) Gelderland
- (D) Noord Brabant
- (E) Drenthe

- (F) Zeeuws Vlaanderen
- (G) Overijssel
- (H) Noord Holland
- (I) Luik
- (J) Groningen

- (K) Flevoland
- (L) Zuid Holland
- (M) None of these answers is correct.

Quest. 15: In which province lies Venlo?

- (A) Noord Holland
- (B) Flevoland
- (C) Groningen
- (D) Zeeuws Vlaanderen
- (E) Luik

- (F) Gelderland
- (G) Overijssel
- (H) Drenthe
- (I) Noord Brabant
- (J) Limburg

- (K) Zuid Holland
- (L) Utrecht
- (M) None of these answers is correct.



Quest. 16:

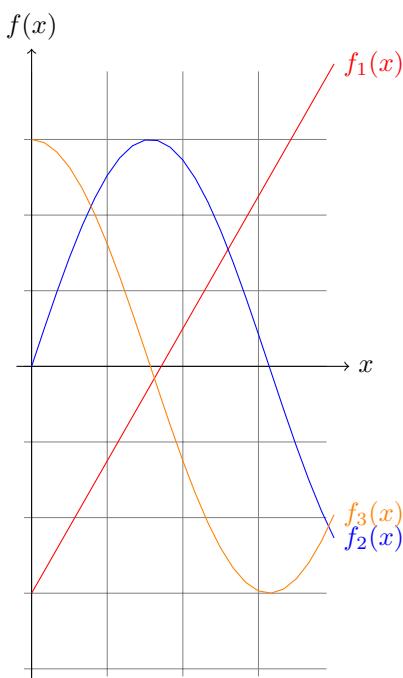
Let X and Y be two independent random variables, following the exponential distribution with respective parameters 2 and 8. To which interval does the probability $\mathbb{P}[X < Y]$ belong ?

- | | | | | |
|--------------|--------------|--------------|--------------|--------------|
| Ⓐ [0, 0.1) | Ⓒ [0.2, 0.3) | Ⓔ [0.4, 0.5) | Ⓖ [0.6, 0.7) | Ⓛ [0.8, 0.9) |
| Ⓑ [0.1, 0.2) | Ⓓ [0.3, 0.4) | Ⓔ [0.5, 0.6) | Ⓗ [0.7, 0.8) | Ⓣ [0.9, 1) |

Quest. 17:♣ In which province lies Dronten?

- | | | |
|-----------------|-----------------|-------------------------------------|
| Ⓐ Groningen | Ⓕ Drenthe | Ⓚ Overijssel |
| Ⓑ Limburg | Ⓖ Gelderland | Ⓛ Zeeuws Vlaanderen |
| Ⓒ Noord Brabant | Ⓗ Noord Holland | Ⓜ None of these answers is correct. |
| Ⓓ Zuid Holland | Ⓛ Luik | |
| Ⓔ Flevoland | Ⓡ Utrecht | |

Quest. 18:♣ Let us consider the three functions which graphs are plotted below:



Then:

- Ⓐ $f_3(3) = -2.97$.
- Ⓑ La fonction $f_1(x)$ est une fonction linéaire.
- Ⓒ $f_2(3) = 0.42$.
- Ⓓ None of these answers is correct.

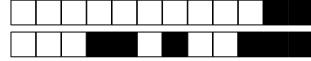
Quest. 19:

Which continental European country is west-most and has an outline like in figure 3.

- Ⓐ Portugal
- Ⓑ Greece
- Ⓒ Ireland
- Ⓓ Scotland



Figure 3: Outline of European country

**Quest. 20:**

What is the sum of 33 and 41 ?

- (A) 1353 (B) -8 (C) 74 (D) 73

Quest. 21:

Which country lies north of Denmark, west of Sweden, east of England, is famous for its *fjords* and has an outline like in figure 4.

- (A) Finland
(B) Norway
(C) Denmark
(D) Sweden

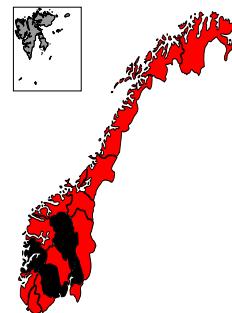


Figure 4: Outline of European country

Quest. 22: Compute $\sqrt{16}$ and round it with two digits after period.

Please code the answer on the separate answer sheet.

Quest. 23:♣ In which province lies Hoogeveen?

- | | | |
|---|---|--|
| (A) Groningen
(B) Drenthe
(C) Zuid Holland
(D) Gelderland
(E) Utrecht | (F) Overijssel
(G) Limburg
(H) Luik
(I) Noord Brabant
(J) Noord Holland | (K) Zeeuws Vlaanderen
(L) Flevoland

(M) <i>None of these answers is correct.</i> |
|---|---|--|

Quest. 24: In what city of the Netherlands is the governement seated?

Please write the answer on the separate answer sheet.

Quest. 25: What is the capital of the Netherlands?

Please write the answer on the separate answer sheet.

Quest. 26:♣ In which province lies Elst?

- | | | |
|--|--|--|
| (A) Flevoland
(B) Noord Holland
(C) Noord Brabant
(D) Zuid Holland
(E) Zeeuws Vlaanderen | (F) Overijssel
(G) Luik
(H) Groningen
(I) Gelderland
(J) Utrecht | (K) Drenthe
(L) Limburg

(M) <i>None of these answers is correct.</i> |
|--|--|--|

Quest. 27:♣ In which province lies Cadzand?

- | | | |
|---|--|---|
| (A) Limburg
(B) Groningen
(C) Drenthe
(D) Noord Brabant
(E) Flevoland | (F) Luik
(G) Zeeuws Vlaanderen
(H) Zuid Holland
(I) Overijssel
(J) Noord Holland | (K) Gelderland
(L) Utrecht

(M) <i>None of these answers is correct.</i> |
|---|--|---|

**Quest. 28:**

Which country lies north of Germany, west of Lithuania, south of Norway and east of England and has an outline like in figure 5.

- (A) Denmark
- (B) The Netherlands
- (C) Sweden
- (D) Finland



Figure 5: Outline of European country

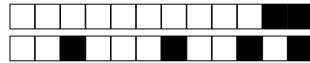
Quest. 29: What is the capital of the Norway?

Please write the answer on the separate answer sheet.

Quest. 30:♣ In which province lies Drachten?

- | | | |
|-------------------|-----------------------|--|
| (A) Flevoland | (F) Drenthe | (K) Overijssel |
| (B) Noord Holland | (G) Luik | (L) Limburg |
| (C) Gelderland | (H) Zuid Holland | |
| (D) Groningen | (I) Utrecht | |
| (E) Noord Brabant | (J) Zeeuws Vlaanderen | (M) <i>None of these answers is correct.</i> |

Answer sheet TOY11I09 Date April 1 2013



+3/8/37+

Name: **Candidate, Charles**

student number **9199910**

Quest. 1: A B C D E F G H I J K L M

Quest. 2: A B C D E F G H I J K L M

Quest. 3: A B C D

Quest. 4: A B C D E

Quest. 5: A B C D

Quest. 6: A B C D

Quest. 7: A B C D

Quest. 8: eu2 W C

Quest. 9: A B C D E F G H I J K L M

Quest. 10: A B C D E F

Quest. 11: A B C D E F G H I J K L M

Quest. 12: A B C D E

Quest. 13: A B C D E F G H I J K L M

Quest. 14: A B C D E F G H I J K L M

Quest. 15: A B C D E F G H I J K L M

Quest. 16: A B C D E F G H I J

Quest. 17: A B C D E F G H I J K L M

Quest. 18: A B C D

Quest. 19: A B C D

Quest. 20: A B C D

Quest. 21: A B C D

Quest. 22:

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Quest. 23: A B C D E F G H I J K L M

Quest. 24: eu4 W C

Quest. 25: eu3 W C

Quest. 26: A B C D E F G H I J K L M

Quest. 27: A B C D E F G H I J K L M

Quest. 28: A B C D

Quest. 29: eu1 W C

Quest. 30: A B C D E F G H I J K L M