IMM - DTU
02405 Probability
2004-4-15
BFN/bfn
Question a)

$$
P(N(0,13)>5)
$$

IMM - DTU
02405 Probability
2004-4-15
BFN/bfn
Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

IMM - DTU
02405 Probability
2004-4-15
BFN/bfn
Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

Question b)

$$
1-(1-\Phi(1))^{2}
$$

| IMM - DTU | 02405 Probability |
| :--- | :--- |
|  | $2004-4-15$ |
| BFN/bfn |  |

Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

Question b)

$$
1-(1-\Phi(1))^{2}
$$

Question c) Drawing helpful, suggests that the following should be true

IMM - DTU
02405 Probability
2004-4-15
BFN/bfn
Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

Question b)

$$
1-(1-\Phi(1))^{2}
$$

Question c) Drawing helpful, suggests that the following should be true

$$
\Phi(1)-\Phi(-1)
$$

IMM - DTU
02405 Probability
2004-4-15
BFN/bfn
Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

Question b)

$$
1-(1-\Phi(1))^{2}
$$

Question c) Drawing helpful, suggests that the following should be true

$$
\Phi(1)-\Phi(-1)
$$

Question d)

$$
P(1>\max (X, Y)-\min (X, Y)
$$

IMM - DTU
02405 Probability
2004-4-15
BFN/bfn
Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

Question b)

$$
1-(1-\Phi(1))^{2}
$$

Question c) Drawing helpful, suggests that the following should be true

$$
\Phi(1)-\Phi(-1)
$$

Question d)

$$
P(1>\max (X, Y)-\min (X, Y)=P(1>|X-Y|)
$$

IMM - DTU

02405 Probability
2004-4-15
BFN/bfn

Question a)

$$
P(N(0,13)>5)=1-\Phi\left(\frac{5}{\sqrt{13}}\right)
$$

Question b)

$$
1-(1-\Phi(1))^{2}
$$

Question c) Drawing helpful, suggests that the following should be true

$$
\Phi(1)-\Phi(-1)
$$

## Question d)

$$
P\left(1>\max (X, Y)-\min (X, Y)=P(1>|X-Y|)=\Phi\left(\frac{1}{\sqrt{2}}\right)-\Phi\left(\frac{-1}{\sqrt{2}}\right)\right.
$$

