## Congratulations! You passed!

Grade received 100% To pass 80% or higher

Go to next item

1.	The method of maximum likelihood gives the same parameter estimates as the method of least squares for any measurement noise distribution.
	O True
	False
	Correct! The noise must be from the Gaussian family.
2.	The product of several Gaussian PDFs with identical variances is also Gaussian.
	True
	O False
	✓ Correct Correct! We used this fact to derive the connection between maximum likelihood and least squares.
3.	The least squares criterion is robust to outliers.
	○ True
	False

4. For a scalar Gaussian random variable, what is the form of the full log likelihood function?

Correct! Least squares is particularly sensitive to outliers due to the use of squared errors!

1/1 point

$$\bigcirc \ -rac{1}{2}\log(2\pi)+rac{1}{2}\log\left(\sigma
ight)-rac{1}{2\sigma^2}\left(x-\mu
ight)^2$$

✓ Correct!

5. True or False, 
$$\operatorname{argmin}_x f(x) = \operatorname{argmax}_x f(-x)$$
.

1/1 point

O True

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