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Information on this title: [www.cambridge.org/9781107012172](http://www.cambridge.org/9781107012172)

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First published 2016

Reprinted 2017

*A catalogue record for this publication is available from the British Library*

*Library of Congress Cataloging-in-Publication data*

Glicksman, Leon R., 1938 author.

Modeling and approximation in heat transfer / John Lienhard, Massachusetts

Institute of Technology, Leon Glicksman, Massachusetts Institute of Technology.

pages cm

Includes bibliographical references.

1. Heat – Transmission – Mathematical models. 2. Heat engineering – Mathematics. I. Lienhard, John H., 1961 author. II. Title.

TJ260.L4453 2016

621.402'2011–dc23 2015032009

ISBN 978-1-107-01217-2 Hardback

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*Cover photo:* View of the space shuttle Atlantis, reentering the Earth's atmosphere, photographed by the International Space Station (courtesy NASA). See homework problem 3.12 for approximate model of reentry heat transfer.