



Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam

By P.E., Allan G. Abubakar



Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar

Visit www.usefulequations.com to purchase book and HP 35s pre-programmed calculator package. The equations in this book are relevant to the following subjects: Geotechnical • Moisture content, dry density, void ratio, degree of saturation, relative density of soil, borrow soil, flow net, laboratory permeability tests, and effective stress • Shear strength and angle of internal friction for triaxial test • Net and ultimate bearing capacities of square, continuous, and circular footings with or without water table • Active, passive, and at-rest lateral forces per unit length of wall with surcharge load and water table, and lateral force per unit length of wall for sloping backfill and vertical wall • Gross and net bearing capacity of mat foundation in saturated clay, and depth of fully compensated mat foundation • Factor of safety against overturning and sliding of retaining walls, maximum stress at the toe, and minimum stress at the heel • Settlement of normally consolidated clay with up to 4 layers of soil given surcharge load, settlement at the center and corner of mat foundation, time rate of settlement, slope stability in saturated clay, and cyclic stress ratio • 2-strut braced cut for sand, soft to medium clay, and stiff clay • Skin friction resistance, end-bearing and allowable capacities of single pile in sand or clay Water Resources and Environmental • Pitot tube, venturi meter, and orifice • Reynolds number, friction factor, head loss using Darcy-Weisbach equation or Hazen-Williams equation, Bernoulli equation with 2 different pipe sizes, pump head, and head loss due to fittings • Open channels using Manning equation for circular, rectangular, and trapezoidal channels • Flow rate and velocity of flow for circular channel when flowing full or partially full just by entering diameter of pipe, depth of water, Manning's n, constant, and slope of energy line (no need to look up tables!!!) • Flow rate and velocity of flow for trapezoidal channel just by entering depth of water, base width of channel, side slope horizontal, Manning's n, constant, and slope of energy line • Chemical feed rate • Rapid mixing • Overflow rate • Detention time • Weir loading rate Transportation • Sight distance and stopping sight distance • Radius of curve, tangent of curve, length of curve, middle ordinate, and external distance of horizontal curve • Stopping sight distance, passing sight distance, curve elevation, stationing of highest or lowest point of curve, and vertical clearance • Flexible and rigid pavement design Structural • Maximum moment of simply supported and cantilever beams, moment of inertia for I-beam, T-beam, and inverted T-beam using parallel axis theorem, maximum bending stresses, and deflection of beam This book contains 200 equations with keystrokes included for HP 35s and HP 33s calculators plus

96 sample problems with step-by-step solutions.

 [Download Useful Equations for HP 35s or HP 33s Calculator f ...pdf](#)

 [Read Online Useful Equations for HP 35s or HP 33s Calculator ...pdf](#)

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam

By P.E., Allan G. Abubakar

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar

Visit www.usefulequations.com to purchase book and HP 35s pre-programmed calculator package. The equations in this book are relevant to the following subjects: Geotechnical • Moisture content, dry density, void ratio, degree of saturation, relative density of soil, borrow soil, flow net, laboratory permeability tests, and effective stress • Shear strength and angle of internal friction for triaxial test • Net and ultimate bearing capacities of square, continuous, and circular footings with or without water table • Active, passive, and at-rest lateral forces per unit length of wall with surcharge load and water table, and lateral force per unit length of wall for sloping backfill and vertical wall • Gross and net bearing capacity of mat foundation in saturated clay, and depth of fully compensated mat foundation • Factor of safety against overturning and sliding of retaining walls, maximum stress at the toe, and minimum stress at the heel • Settlement of normally consolidated clay with up to 4 layers of soil given surcharge load, settlement at the center and corner of mat foundation, time rate of settlement, slope stability in saturated clay, and cyclic stress ratio • 2-strut braced cut for sand, soft to medium clay, and stiff clay • Skin friction resistance, end-bearing and allowable capacities of single pile in sand or clay Water Resources and Environmental • Pitot tube, venturi meter, and orifice • Reynolds number, friction factor, head loss using Darcy-Weisbach equation or Hazen-Williams equation, Bernoulli equation with 2 different pipe sizes, pump head, and head loss due to fittings • Open channels using Manning equation for circular, rectangular, and trapezoidal channels • Flow rate and velocity of flow for circular channel when flowing full or partially full just by entering diameter of pipe, depth of water, Manning's n, constant, and slope of energy line (no need to look up tables!!!) • Flow rate and velocity of flow for trapezoidal channel just by entering depth of water, base width of channel, side slope horizontal, Manning's n, constant, and slope of energy line • Chemical feed rate • Rapid mixing • Overflow rate • Detention time • Weir loading rate Transportation • Sight distance and stopping sight distance • Radius of curve, tangent of curve, length of curve, middle ordinate, and external distance of horizontal curve • Stopping sight distance, passing sight distance, curve elevation, stationing of highest or lowest point of curve, and vertical clearance • Flexible and rigid pavement design Structural • Maximum moment of simply supported and cantilever beams, moment of inertia for I-beam, T-beam, and inverted T-beam using parallel axis theorem, maximum bending stresses, and deflection of beam This book contains 200 equations with keystrokes included for HP 35s and HP 33s calculators plus 96 sample problems with step-by-step solutions.

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar
Bibliography

- Sales Rank: #987501 in Books
- Published on: 2013-05-11
- Original language: English
- Number of items: 1
- Dimensions: 11.00" h x .81" w x 8.50" l, 1.82 pounds
- Binding: Paperback
- 356 pages

 [Download Useful Equations for HP 35s or HP 33s Calculator f ...pdf](#)

 [Read Online Useful Equations for HP 35s or HP 33s Calculator ...pdf](#)

Download and Read Free Online Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar

Editorial Review

Users Review

From reader reviews:

Carrie Freeman:

What do you about book? It is not important to you? Or just adding material when you really need something to explain what yours problem? How about your spare time? Or are you busy man or woman? If you don't have spare time to perform others business, it is gives you the sense of being bored faster. And you have spare time? What did you do? All people has many questions above. They need to answer that question since just their can do in which. It said that about book. Book is familiar on every person. Yes, it is right. Because start from on kindergarten until university need this particular Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam to read.

John Olive:

People live in this new moment of lifestyle always aim to and must have the extra time or they will get lots of stress from both day to day life and work. So , once we ask do people have extra time, we will say absolutely yes. People is human not a robot. Then we inquire again, what kind of activity have you got when the spare time coming to you of course your answer will unlimited right. Then ever try this one, reading books. It can be your alternative throughout spending your spare time, the actual book you have read is definitely Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam.

Jonathan Sanders:

Do you have something that that suits you such as book? The reserve lovers usually prefer to opt for book like comic, limited story and the biggest some may be novel. Now, why not striving Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam that give your enjoyment preference will be satisfied by means of reading this book. Reading practice all over the world can be said as the opportunity for people to know world far better then how they react towards the world. It can't be explained constantly that reading addiction only for the geeky man or woman but for all of you who wants to be success person. So , for all of you who want to start studying as your good habit, you may pick Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam become your own personal starter.

Samuel Freeman:

Your reading sixth sense will not betray you actually, why because this Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam book written by well-known writer who knows well how to make book that can be understand by anyone who read the book. Written within good manner for you, leaking every

ideas and publishing skill only for eliminate your own personal hunger then you still hesitation Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam as good book not merely by the cover but also with the content. This is one book that can break don't evaluate book by its include, so do you still needing one more sixth sense to pick this specific!? Oh come on your looking at sixth sense already said so why you have to listening to a different sixth sense.

**Download and Read Online Useful Equations for HP 35s or HP 33s
Calculator for the Civil PE Exam By P.E., Allan G. Abubakar
#J3GIUMHZS5F**

Read Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar for online ebook

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar books to read online.

Online Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar ebook PDF download

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar Doc

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar Mobipocket

Useful Equations for HP 35s or HP 33s Calculator for the Civil PE Exam By P.E., Allan G. Abubakar EPub