

# HEWLETT-PACKARD

Step-by-Step Solutions  
For Your HP Calculator

## Engineering Applications

$$\begin{aligned} & \sum_{i=1}^{n_1} x_i - \frac{1}{n_1} H_0 = 10 \text{ cm} + D y_i \\ & \hat{\mu}_1 - \hat{\mu}_2 = D y_i \\ & \hat{\mu}_1^* = \frac{1}{M} \left[ \left( \frac{n_1}{k+1} \right) \left( 1 + \frac{k-1}{0.2 M^2} \right) \right] \\ & D_i = x_i - y_i - 2\pi c_1 \sigma T^4 \\ & \sum_{k=1}^n \text{LAT}_k \left( \frac{1}{2} \text{DEP}_k + \sum_{j=1}^{2(k-1)} \frac{\text{DEP}_j}{c_3} \right) s = \frac{s_D}{\sqrt{n}} \\ & \lambda = \frac{1}{n} \sum_{i=1}^n D_i - j \text{ Area} = \bar{y} \\ & s_{smax} = \sqrt{\left( \frac{s_x - s_y}{2} \right)^2} \\ & \cos A Z = - \frac{2\pi c_1}{\lambda^5 (e^{c_2/\lambda T} - 1)} \\ & E_{b\lambda} = \frac{k}{k+1} \frac{F}{x} = \frac{mg}{x} = 0 \end{aligned}$$

HP-32S

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# *Step-by-Step Solutions for Your HP-32S Calculator*

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*Engineering Applications* contains a variety of programs, examples, and solutions to show how you can easily solve your engineering problems.

## **■ Electrical Engineering**

Reactance Chart • Impedance of a Ladder Network • Smith Chart Conversions • Transistor Amplifier Performance

## **■ Mechanical Engineering**

Black Body Thermal Radiation • Ideal Gas Equation • Conduit Flow  
• Static Equivalent at a Point • Composit Section Properties  
• Soderberg's Equation for Fatigue

## **■ Civil Engineering**

Mohr's Circle for Stress • Field Angle Traverse

## **■ Statistics**

t Statistics • Chi-Square Evaluation • F Distribution • Analysis of Variance (One Way) • Binomial Distribution • Poisson Distribution

## **■ Mathematics**

Triangle Solutions • Derivative of a Function • Linear Interpolation  
• Circle Determined by Three Points



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