

# Complete Solutions Manual

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## Statistics Companion Support for Introductory Statistics

**Roxy Peck**

California Polytechnic State University, San Luis Obispo

**Tom Short**

West Chester University of Pennsylvania

Prepared by

**Stephen Miller**

Winchester Thurston School, Pittsburgh, PA





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# Chapter 1: Getting Ready for Statistics

## Section 1.1: Numbers and the Number Line – A Quick Review

1.1:  $68 \div 34 = 2$

1.2:  $25 \times (-9) = -225$

1.3:  $-5 - (-9) = 4$

1.4:  $-13 \times -16 = 208$

1.5:  $-8 \div 4 = -2$

1.6:  $-6 - 92 = -98$

1.7:  $9 \div 3 = 3$

1.8:  $5 \div 1 = 5$

1.9:  $-14 - 3 = -17$

1.10:  $-4 + (-3) = -7$

1.11: 6 is greater

1.12: 7 is greater

1.13: 47 is greater

1.14: 1 is greater

1.15: -64 is greater

1.16: 7 is greater

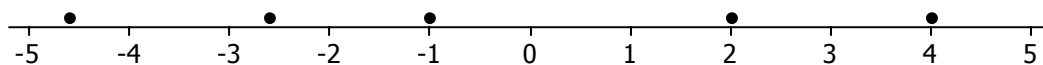
1.17: 1 is greater

1.18: 14 is greater

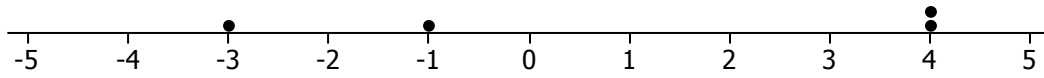
1.19: 36 is greater

1.20: 4 is greater

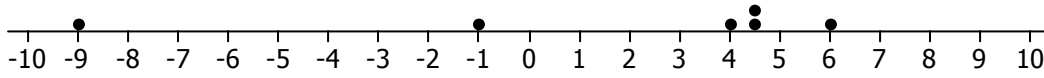
1.21:



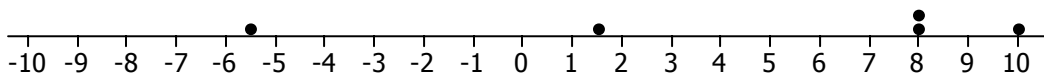
1.22:



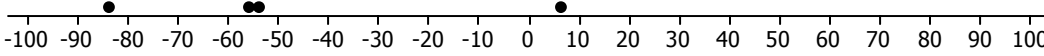
1.23:



1.24:



1.25:



## Section 1.2: Rounding Decimal Numbers

1.26:  $-31.31757$

1.27:  $1220.238752$

1.28:  $-69.967462$

1.29:  $-60.3$

1.30:  $-2.0$

1.31:  $-2.3$

1.32:  $9366.9084$

1.33:  $-7.49585786$

1.34:  $-336.1$

1.35:  $8893.43$

### Section 1.3: Ordering Decimal Numbers

1.36:  $-3.14975$  is greater

1.37:  $-763.3134$  is greater

1.38:  $-97.2$  is greater

1.39:  $-44.2832$  is greater

1.40:  $-97.99842$  is greater

1.41:  $1.168225$  is greater

1.42:  $-2.6628751$  is greater

1.43:  $4.57297$  is greater

1.44:  $8808.33464$  is greater

1.45:  $-9.50625$  is greater

### Section 1.4: Getting to Know Your Calculator – Order of Operations, Powers of Numbers, Square Roots, and Scientific Notation

1.46:  $-25 \times 6 = -150$

1.47:  $(2 \times 6^3)^2 = (2 \times 216)^2 = (432)^2 = 186,624$

1.48:  $\sqrt{4} + (-6) = 2 + (-6) = -4$

1.49:  $\sqrt{7^3 \div 94} = \sqrt{343 \div 94} = \sqrt{3.648936} = 1.91$

1.50:  $(39 - 29) \div \sqrt{4} = 10 \div 2 = 5$

1.51:  $-(\sqrt{66} \times 4) \times 9 = -292.47$

1.52:  $6 - (64 + (-6)) = 6 - 58 = -52$

1.53:  $3^3 - 4 - 19 = 27 - 4 - 19 = 4$

1.54:  $(\sqrt{99} - 4 - \sqrt{57})^2 = 2.55987$

1.55:  $(8 \div 85) + (-72) = -71.91$

1.56:  $\sqrt{3} \div (77 + 9) \div (-76) = -0.000265$

1.57:  $4^2 - \sqrt{5} + 14^2 \times (-5) = -966.24$

$$1.58: (8 + \sqrt{9} + 3^4 \times 7)^3 = 193,100,552$$

$$1.59: -(7 \div 61 \div 2 \times 6) = -0.34$$

$$1.60: ((-4) - 8 - 24)^2 \times 4 = 5184$$

$$1.61: 70 \div (4 - 0)^2 \times 88 \times 9 = 3465$$

$$1.62: (\sqrt{94} - 5^2) \times (5 - (-65)) \div (-6) = 178.554$$

$$1.63: (5 + 83 + \sqrt{9} + 55) \div 4 = 36.5$$

$$1.64: (\sqrt{65} \div 6)^3 - \sqrt{4} \div \sqrt{28} + (-3) = -0.951822$$

$$1.65: 16 \div 8^2 \times 4 \div 7^3 \times (-1) = -0.003$$