

Question:

- (1) **(5 points)** Elridge Furniture discounts furniture 13% to customers paying cash. Jennifer paid \$1869.48 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (2) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 13% and is being sold for \$1648.21. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (3) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 17% and is being sold for \$1611.51. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (4) **(5 points)** Elridge Furniture discounts furniture 12% to customers paying cash. Jennifer paid \$1667.99 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (5) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 16% and is being sold for \$1138.75. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (6) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 13% and is being sold for \$1128.54. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (7) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 16% and is being sold for \$1580.15. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (8) **(5 points)** In April of this year, Greenfield received 12.93 inches of rain. This was 17% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (9) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 16% and is being sold for \$1722.29. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (10) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 14% and is being sold for \$1541.96. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (11) **(5 points)** Elridge Furniture discounts furniture 14% to customers paying cash. Jennifer paid \$1796.14 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.

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- (12) **(5 points)** Elridge Furniture discounts furniture 18% to customers paying cash. Jennifer paid \$1522.91 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (13) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 18% and is being sold for \$1132.59. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (14) **(5 points)** In April of this year, Greenfield received 14.04 inches of rain. This was 13% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (15) **(5 points)** Elridge Furniture discounts furniture 13% to customers paying cash. Jennifer paid \$1791.42 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (16) **(5 points)** Elridge Furniture discounts furniture 13% to customers paying cash. Jennifer paid \$1815.58 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (17) **(5 points)** In April of this year, Greenfield received 15.19 inches of rain. This was 14% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (18) **(5 points)** Elridge Furniture discounts furniture 16% to customers paying cash. Jennifer paid \$1483.60 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (19) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 15% and is being sold for \$1804.46. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (20) **(5 points)** Elridge Furniture discounts furniture 17% to customers paying cash. Jennifer paid \$1796.61 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (21) **(5 points)** Elridge Furniture discounts furniture 18% to customers paying cash. Jennifer paid \$1228.74 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (22) **(5 points)** Elridge Furniture discounts furniture 16% to customers paying cash. Jennifer paid \$1466.78 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.

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- (23) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 15% and is being sold for \$1032.99. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (24) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 14% and is being sold for \$1327.71. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (25) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 16% and is being sold for \$1249.93. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (26) **(5 points)** In April of this year, Greenfield received 13.04 inches of rain. This was 18% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (27) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 18% and is being sold for \$1085.44. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (28) **(5 points)** In April of this year, Greenfield received 12.74 inches of rain. This was 17% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (29) **(5 points)** In April of this year, Greenfield received 11.95 inches of rain. This was 13% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (30) **(5 points)** Elridge Furniture discounts furniture 15% to customers paying cash. Jennifer paid \$1054.65 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (31) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 15% and is being sold for \$1592.27. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (32) **(5 points)** In April of this year, Greenfield received 12.93 inches of rain. This was 13% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (33) **(5 points)** Elridge Furniture discounts furniture 17% to customers paying cash. Jennifer paid \$1402.40 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.

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- (34) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 18% and is being sold for \$1607.45. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (35) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 13% and is being sold for \$1906.45. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (36) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 12% and is being sold for \$1304.73. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (37) **(5 points)** In April of this year, Greenfield received 11.15 inches of rain. This was 12% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (38) **(5 points)** Elridge Furniture discounts furniture 16% to customers paying cash. Jennifer paid \$1314.42 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (39) **(5 points)** In April of this year, Greenfield received 9.77 inches of rain. This was 13% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (40) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 13% and is being sold for \$1185.49. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (41) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 16% and is being sold for \$1433.28. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (42) **(5 points)** In April of this year, Greenfield received 8.74 inches of rain. This was 14% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (43) **(5 points)** Elridge Furniture discounts furniture 13% to customers paying cash. Jennifer paid \$1608.55 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (44) **(5 points)** In April of this year, Greenfield received 10.87 inches of rain. This was 16% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.

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- (45) **(5 points)** In April of this year, Greenfield received 10.29 inches of rain. This was 15% less than the amount recorded in April of 2010. How much rain did Greenfield receive in April 2010? Set up an algebraic equation to represent the situation and solve. Show units.
- (46) **(5 points)** Elridge Furniture discounts furniture 17% to customers paying cash. Jennifer paid \$1720.52 cash for a roll-top desk. What was the original price of the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (47) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 17% and is being sold for \$1431.30. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (48) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 13% and is being sold for \$1292.16. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (49) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 12% and is being sold for \$1387.91. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.
- (50) **(5 points)** A roll-top desk in Elridge Furniture has been marked up 17% and is being sold for \$1344.33. How much did Elridge Furniture pay the distributor for the desk? (Round to the nearest cent.) Set up an algebraic equation to represent the situation and solve. Show units.

Solutions:

- (1) Paid \$1869.48 for a desk that was 13% off. Original cost was \$2148.83.
- (2) Desk marked up 13% to \$1648.21. Was originally \$1458.59.
- (3) Desk marked up 17% to \$1611.51. Was originally \$1377.36.
- (4) Paid \$1667.99 for a desk that was 12% off. Original cost was \$1895.44.
- (5) Desk marked up 16% to \$1138.75. Was originally \$981.68.
- (6) Desk marked up 13% to \$1128.54. Was originally \$998.71.
- (7) Desk marked up 16% to \$1580.15. Was originally \$1362.20.
- (8) Received 12.93 inches of rain, 17% less rain than normal. Normal is 15.58 inches.
- (9) Desk marked up 16% to \$1722.29. Was originally \$1484.73.
- (10) Desk marked up 14% to \$1541.96. Was originally \$1352.60.
- (11) Paid \$1796.14 for a desk that was 14% off. Original cost was \$2088.53.
- (12) Paid \$1522.91 for a desk that was 18% off. Original cost was \$1857.21.
- (13) Desk marked up 18% to \$1132.59. Was originally \$959.82.
- (14) Received 14.04 inches of rain, 13% less rain than normal. Normal is 16.14 inches.
- (15) Paid \$1791.42 for a desk that was 13% off. Original cost was \$2059.10.
- (16) Paid \$1815.58 for a desk that was 13% off. Original cost was \$2086.87.
- (17) Received 15.19 inches of rain, 14% less rain than normal. Normal is 17.66 inches.
- (18) Paid \$1483.60 for a desk that was 16% off. Original cost was \$1766.19.
- (19) Desk marked up 15% to \$1804.46. Was originally \$1569.10.
- (20) Paid \$1796.61 for a desk that was 17% off. Original cost was \$2164.59.
- (21) Paid \$1228.74 for a desk that was 18% off. Original cost was \$1498.46.
- (22) Paid \$1466.78 for a desk that was 16% off. Original cost was \$1746.17.
- (23) Desk marked up 15% to \$1032.99. Was originally \$898.25.
- (24) Desk marked up 14% to \$1327.71. Was originally \$1164.66.
- (25) Desk marked up 16% to \$1249.93. Was originally \$1077.53.
- (26) Received 13.04 inches of rain, 18% less rain than normal. Normal is 15.90 inches.
- (27) Desk marked up 18% to \$1085.44. Was originally \$919.86.
- (28) Received 12.74 inches of rain, 17% less rain than normal. Normal is 15.35 inches.
- (29) Received 11.95 inches of rain, 13% less rain than normal. Normal is 13.74 inches.
- (30) Paid \$1054.65 for a desk that was 15% off. Original cost was \$1240.76.
- (31) Desk marked up 15% to \$1592.27. Was originally \$1384.58.
- (32) Received 12.93 inches of rain, 13% less rain than normal. Normal is 14.86 inches.
- (33) Paid \$1402.40 for a desk that was 17% off. Original cost was \$1689.64.
- (34) Desk marked up 18% to \$1607.45. Was originally \$1362.25.
- (35) Desk marked up 13% to \$1906.45. Was originally \$1687.12.
- (36) Desk marked up 12% to \$1304.73. Was originally \$1164.94.
- (37) Received 11.15 inches of rain, 12% less rain than normal. Normal is 12.67 inches.
- (38) Paid \$1314.42 for a desk that was 16% off. Original cost was \$1564.79.
- (39) Received 9.77 inches of rain, 13% less rain than normal. Normal is 11.23 inches.
- (40) Desk marked up 13% to \$1185.49. Was originally \$1049.11.
- (41) Desk marked up 16% to \$1433.28. Was originally \$1235.59.
- (42) Received 8.74 inches of rain, 14% less rain than normal. Normal is 10.16 inches.
- (43) Paid \$1608.55 for a desk that was 13% off. Original cost was \$1848.91.
- (44) Received 10.87 inches of rain, 16% less rain than normal. Normal is 12.94 inches.
- (45) Received 10.29 inches of rain, 15% less rain than normal. Normal is 12.11 inches.

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- (46) Paid \$1720.52 for a desk that was 17% off. Original cost was \$2072.92.
 - (47) Desk marked up 17% to \$1431.30. Was originally \$1223.33.
 - (48) Desk marked up 13% to \$1292.16. Was originally \$1143.50.
 - (49) Desk marked up 12% to \$1387.91. Was originally \$1239.21.
 - (50) Desk marked up 17% to \$1344.33. Was originally \$1149.00.