

# Answers to Course 1 Unit 3 Practice

## LESSON 11-1

1.

| Activity       | Order |
|----------------|-------|
| Comb hair      | 6     |
| Dress          | 3     |
| Eat breakfast  | 7     |
| Get out of bed | 1     |
| Pack book bag  | 8     |
| Put on shoes   | 5     |
| Put on socks   | 4     |
| Take a shower  | 2     |
| Walk to school | 9     |

2. a. 10  
b. 18  
c. 1  
d. 7  
e. 20
3. a. Parentheses are not needed.  
b.  $(10 + 14) \div 2 = 12$   
c.  $(16 \div 4 + 24) \div 2 = 14$
4. B
5. B

## LESSON 11-2

6. a. 39  
b. 17  
c. 24  
d. 98  
e. 45
7. a.  $2n = n^2$  if and only if  $n = 0, 2$ . For all other values of  $n$ , the expressions are not equivalent.  
b.  $(2x)^2 = 4x^2$  for all real values of  $x$ .
8. a.  $10y, -16$   
b.  $ab^2, -3ab, 9$
9. a. 48, 3  
b. 72, 1
10. D

## LESSON 11-3

11. a. subtraction;  $n - 8$   
b. division;  $n \div 12$  or  $\frac{n}{12}$   
c. multiplication;  $7n$
12. a.  $12n$   
b.  $\frac{1}{2}n - 9$   
c.  $(n^3 + 3)$   
d.  $(n + 5)^2$   
e.  $7n - 6$
13. a. Briana paid \$.04 per ounce for the bananas.  
b. Sal paid about \$.03 per ounce for the bananas.  
c. Sal got the better buy.
14. a.  $15n$   
b.  $10.5n$   
c. Raphael will save \$13.50 if he rents the bike on line.
15. D

## LESSON 11-4

16. a. Additive Identity  
b. Commutative Property of Multiplication  
c. Distributive Property  
d. Associative Property  
e. Multiplicative Identity
17. a. No  
b. Yes  
c. Yes
18. a.  $25 + 0$   
b.  $9(x + 1)$   
c.  $3 \cdot (6 \cdot y)$   
d.  $(3 \cdot y) \cdot 6$
19. B
20. B

## LESSON 12-1

21. a. Equation  
b. Expression  
c. Equation
22. a. Let  $n$  = the number;  $51 - n = 28$   
b. Let  $n$  = the number;  $25n = 100$   
c. Let  $f$  = the number of fish Stephan caught on Saturday;  $3f = 18$   
d. Let  $p$  = a puzzle piece;  $179 + p = 300$   
e. Let  $w$  = the number of weeks;  $16w = 80$
23. B
24. Let  $d$  = Dyami's age;  $d + (d + 3) = 23$
25. C

## LESSON 12-2

26. a. 13  
b. 9  
c. 35  
d. 12
27. D
28. a.  $360 = lw$   
b.  $360 = 18l$   
c. 20; what number times 18 gives 360?
29. a.



- b.  $75 + 75 + x + x = 450$   
c. 150 feet
30. D
- ## LESSON 13-1
31. a. Let  $x$  represent the amount she needs to save.  
b.  $\$120 + \text{amount needed} = \$570$   
c.  $120 + x = 570$   
d.  $x = 450$

32. C
33. Sample answer: Let  $t$  = number of trees left;  
 $48 + t = 150$ ;  $t = 102$
34. B
35. Sample answer: Let  $m$  = the amount owed;  
 $550 + m = 1200$ ;  $m = 650$

## LESSON 13-2

36. a.  $x = 14$   
b.  $x = 7$   
c.  $y = 32$   
d.  $y = 37$
37. Sample answer: Let  $r$  = amount of ribbon needed;  
 $r + 27 = 82$ ;  $r = 55$
38. D
39. B
40. Sample answer: Let  $d$  = the difference in miles;  
 $d + 30 = 42$ ;  $d = 12$

## LESSON 13-3

41. a. Let  $x$  = miles to vacation home  
b.  $x - 60 = 175$   
c.  $x = 235$  miles
42. C
43. Sample answer: No; subtracting 4 from both sides does not isolate the variable. Dae Youn would need to add 4 to each side of the scale.
44. C
45. Let  $x$  = the original price of the coat;  $x - 25 = 82$ ;  
 $x = 107$

## LESSON 13-4

46. a.  $w = 32$   
b.  $b = 36$   
c.  $w = 1\frac{5}{8}$  or  $\frac{13}{8}$   
d.  $r = 48.72$
47. D
48. B

49. a. Let  $x =$  the number of pictures

b.  $x - 21 = 52$

c.  $x = 73$

50. C

### LESSON 14-1

51. a.  $x = 3$

b.  $a = 12$

c.  $w = 8$

d.  $q = 8$

52. D

53. Let  $x =$  the number of hours worked;  $9x = 288$ ;  
 $x = 32$

54. C

55. Let  $x =$  the number of chickens in each area;  
 $6x = 1500$ ;  $x = 250$

### LESSON 14-2

56. a.  $y = 30$

b.  $r = 4.5$

c.  $a = 15$

d.  $w = 36$

57.  $\frac{4}{5}x = 52$ ;  $x = 65$

58. A

59. Sample answer: Let  $a =$  number of packages of markers;  $12a = 420$ ;  $a = 35$

60. B

### LESSON 14-3

61. a.  $a = 84$

b.  $w = 3.6$

c.  $d = 63$

d.  $f = 192$

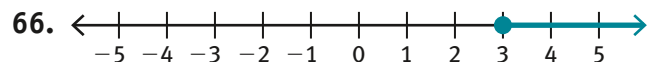
62. A

63. B

64. Let  $d =$  the amount of the discount;  $\frac{d}{0.25} = 300$ ;  
 $d = 75$

65. Sample answer; Yes she is correct. The solution to each equation is 256. To solve the first equation you multiply each side by 8. To solve the second equation you multiply each side by 32. However, 32 times 8 is still equal to 32 times 8. Both equations have the same solution.

### LESSON 15-1



67. A

68. a.  $x \leq 250$

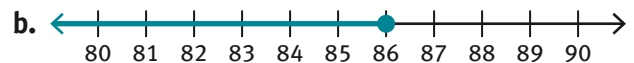
b.  $x > 5$

c.  $x \geq 30$

d.  $x < 12$

69. D

70. a.  $x \leq 86$



## LESSON 15-2

71. B
72. a.  $x$  will represent the number of puppies that can be taken in.  
 b. The symbol for at most is  $\leq$ .  
 c.  $x + 36 \leq 55$
73. a.  $x \leq 33$   
 b.  $x > \frac{13}{4}$   
 c.  $x < 18.6$   
 d.  $x \geq \frac{7}{2}$
74. a.  $x + 4 \geq 12$   
 b.  $x + 9 \leq 15$   
 c.  $x + 15 > 25$
75. D

## LESSON 16-1

76. a.

| Distance (miles) | Time (minutes) |
|------------------|----------------|
| 1                | 15             |
| 2                | 30             |
| 3                | 45             |
| 4                | 60             |
| 5                | 75             |

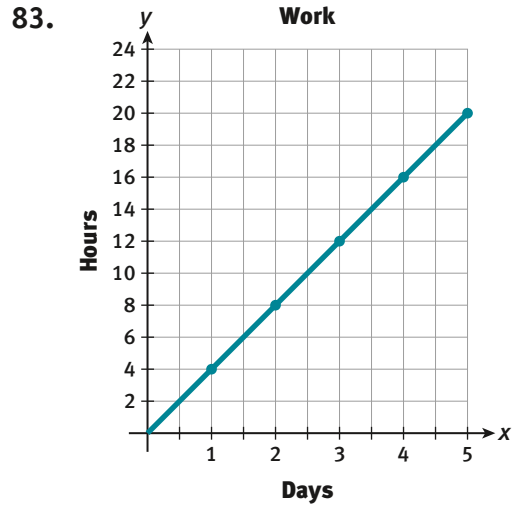
- b.  $m = 15d$   
 c. 7 miles
77. B
78. \$864
79. A
80. a. Jesse drives 55 miles per hour.  
 b. How far does Jesse drive in 6 hours?  
 [330 miles]

## LESSON 16-2

81. C

82.

| Days | Hours |
|------|-------|
| 1    | 4     |
| 2    | 8     |
| 3    | 12    |
| 4    | 16    |
| 5    | 20    |



84. B

85. a.

| Sal | Nick |
|-----|------|
| 1   | 6    |
| 2   | 7    |
| 3   | 8    |
| 4   | 9    |
| 5   | 10   |

- b.  $y = x + 5$   
 c.  $x$  is the independent variable and  $y$  is the dependent variable.