Section 3.2 Exercises Part C

Solve.

1. $5\left(\dfrac{3x-1}{5} - 2\right) = 70$

2. $3\left(\dfrac{-6x+4}{2} + 3\right) - 5 = 19$

3. $-4 - 9m = -22$

4. $\frac{6}{7}t = -24$

5. $19 = 3x - 7$

6. $\dfrac{5x-7}{3} = -9$

Solve for the specified variable.

7. $\dfrac{2s - at^2}{2t} = V$ for s

8. $r = \dfrac{I}{pt}$ for p

9. $d = \dfrac{LR_2}{R_2 + R_1}$ for R_1

10. $\dfrac{9s - 5g}{11} = c$ for s

11. 84 is 6 more than 3 times a number. What is the number?

12. Two numbers add to 438 and the first is 74 bigger than the second. What are the two numbers?

13. Find the area of the shaded region:

14in

9in
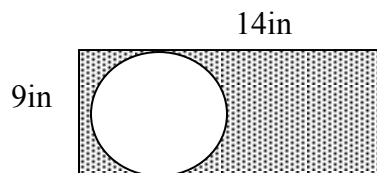
14. If a rectangle's length is 7 more than 4 times the width and the perimeter is 194 mm, what are the dimensions or the rectangle?

15. Find the missing variable for a rectangle:

P = 48.3 ft
w = 7.2 ft
$l =$

16. Find the missing variable for a sphere:

SA = 800 in^2
r =

Solve.

17. $7p + 12 = 13 - 7p$

18. $4n + 68 = 7 - 2(n - 2)$

19. $7x - 10 = 5(x - 2)$

20. $9x - 4 = 15x$ **21.** $8x - 7(x+3) = x - 21$ **22.** $.18x = 13 - .20x$

23.   14 is what percent of 68?   **24.**   What is 37% of 754?

25.   119 is 18% of what?   **26.**   27 is what percent of 74?

27.   Original Price:$192.56   **28.**   Original Price:
Tax: 7.3%   Discount: 35%
Final Price: Final Price: $43.90

29. If the price of a meal after a 20% tip was $28.80, what was the price of the meal before the tip was added?

30. If the price of an object dropped 15% down to $59.50, what was the original price?

Solve.

31. $\frac{7}{3}t - 2 = 19 + 5t$ **32.** $-\frac{3}{4}(x - 4) = 5 + 2x$ **33.** $\frac{1}{6}x - 4 = 3 + \frac{3}{10}x$

34. $\frac{5}{2}(-4x - 2) = \frac{3}{4}x + 6$ **35.** $\frac{x-5}{3} = \frac{5x+8}{6}$ **36.** $\frac{x+7}{14} = 6 - \frac{3}{7}x$

Answers:

1. $x = 27$
2. $x = -1$
3. $m = 2$
4. $t = -28$
5. $x = \frac{26}{3}$
6. $x = -4$
7. $s = \dfrac{2Vt + at^2}{2}$
8. $p = \dfrac{I}{rt}$
9. $R_1 = \dfrac{LR_2 - dR_2}{d}$
10. $s = \dfrac{11c + 5g}{9}$
11. 26
12. 182, 256
13. 62.38 in^2
14. 18mm X 79mm
15. $l = 16.95$ ft
16. 7.98in
17. $p = \frac{1}{14}$
18. $n = -9.5$
19. $x = 0$
20. $x = -\frac{2}{3}$
21. All numbers
22. $x = 34.21$
23. 20.6%
24. 278.98
25. 661.1
26. 36.5%
27. $206.62

28. $67.54
29. $24
30. $70
31. $t = -\frac{63}{8}$
32. $x = -\frac{8}{11}$
33. $x = -52.5$
34. $x = -\frac{44}{43}$
35. $x = -6$
36. $x = 11$

Assignment 3.2c