

Section 3.3 Exercises Part C – Exam Review

Solve.

1. $5\left(\frac{3x-1}{5}-2\right)=10$ 2. $3\left(\frac{-6x+4}{2}+3\right)-5=25$ 3. $-7-9m=-22$
4. $\frac{6}{7}t=-48$ 5. $19=7x-39$ 6. $\frac{4x-7}{3}=-9$

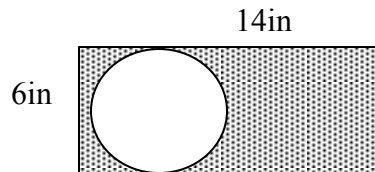
Solve for the specified variable.

7. $\frac{2s+at^2}{5t}=V$ for s 8. $r=\frac{I}{pt}$ for t
9. $d=\frac{LR_2}{R_2+R_1}$ for L 10. $\frac{9s-5g}{11}=c$ for g

11. 84 is 6 more than 13 times a number. What is the number?

12. Two numbers add to 438 and the first is 72 bigger than the second. What are the two numbers?

13. Find the area of the shaded region:



14. If a rectangle's length is 5 more than 4 times the width and the perimeter is 180 mm, what are the dimensions of the rectangle?

15. Find the missing variable for a rectangle:

$$P = 78.3 \text{ ft}$$
$$w = 17.2 \text{ ft}$$
$$l =$$

16. Find the missing variable for a cylinder:

$$SA = 453.9 \text{ in}^2$$
$$r = 7$$
$$h =$$

Solve.

17. $7p+12=15-7p$ 18. $3n+68=7-2(n-2)$ 19. $2x-10=5(x-4)$

20. 18 is what percent of 68?

21. 119 is 28% of what?

22. Original Price: \$ 92.56
Tax: 7.3%
Final Price:

23. Original Price:
Discount: 35%
Final Price: \$13.90

24. If the price of a meal after a 20% tip was \$16.08, what was the price of the meal before the tip was added?

25. If the price of an object dropped 15% down to \$413.10, what was the original price?

Solve.

26. $\frac{5}{2}(-3x + 2) = \frac{3}{4}x + 6$

27. $\frac{x-5}{3} = \frac{4x+8}{6}$

28. $\frac{2x+7}{21} = 6 - \frac{3}{7}x$

29. Find the price, interest rate, and years of a loan for homes in your area. In your “Life Plan” spreadsheet, enter the Price, Number of years, and Interest Rate, then use the PMT formula to figure out how much it will cost to own a home. Report to your group when you have completed it.

30. Using the PMT formula in your “Life Plan” spreadsheet, find the cost of owning your own transportation. Report results to your group.

31. Create a Visual Chart on one side of a piece of paper for Chapter 3 material including information and examples relating to Linear Equations and Applications.

Answers:

1. $x = 7$

2. $x = -\frac{5}{3}$

3. $\frac{5}{3}$

4. $t = -56$

5. $x = \frac{58}{7}$

6. $x = -5$

7. $S = \frac{(5Vt - at^2)}{2}$

8. $r = \frac{I}{pr}$

9. $L = \frac{d(R_2 + R_1)}{R_2}$

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

11. 6

12. 183, 255

13. 55.73 in^2

14. $l = 73 \text{ mm}, w = 17 \text{ mm}$

15. 21.95 ft

16. 3.32 in

17. $p = \frac{1}{14}$

18. $n = -\frac{57}{5}$

19. $x = \frac{10}{3}$

20. 26.5%

21. 425

22. \$99.32

23. \$21.38

24. \$13.40

25. \$486.00

26. $x = -\frac{4}{33}$

27. $x = -9$

28. $x = \frac{119}{11}$

29. Will be submitted in Portfolio

30. Will be submitted in Portfolio

31. Make it nice.