

Practice

For use with pages 247-252

Solve the equation. Check your solution.

1. $\frac{5}{8}x = 30$

2. $\frac{7}{11}x = 14$

3. $-\frac{7}{12}x = 14$

4. $28 = \frac{14}{15}x$

5. $-\frac{5}{6}x = 20$

6. $-24 = -\frac{12}{19}x$

7. $\frac{7}{11}x = \frac{4}{11}$

8. $\frac{4}{5}x = \frac{7}{5}$

9. $\frac{9}{10}x = \frac{2}{5}$

10. $-\frac{3}{4}x = \frac{11}{32}$

11. $\frac{3}{14} = -\frac{11}{21}x$

12. $-\frac{7}{13}x = \frac{5}{26}$

Solve the equation. Check your solution.

13. $\frac{1}{2}x + 9 = 36$

14. $\frac{4}{7}x + 8 = 28$

15. $6 = \frac{1}{2}x - \frac{1}{4}$

16. $-\frac{2}{3}x + (-10) = 14$

17. $32 = 16 - \frac{1}{2}x$

18. $29 = \frac{9}{11}x + 11$

19. $-\frac{14}{17}x + \frac{13}{17} = \frac{12}{17}$

20. $\frac{5}{11}x + \frac{4}{11} = \frac{3}{11}$

21. $\frac{8}{19} = -\frac{10}{19}x - \frac{9}{19}$

22. $\frac{2}{3}x + \frac{5}{9} = \frac{4}{9}$

23. $\frac{1}{2} = \frac{9}{14}x - \frac{4}{7}$

24. $\frac{8}{21} = -\frac{10}{21}x + \frac{3}{7}$

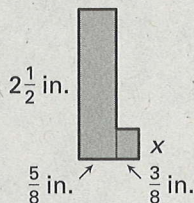
5.6

Continued

Practice

For use with pages 247-252

25. The figure is composed of two rectangles. The area of the figure is $1\frac{3}{4}$ square inches.



- a. Find the area of the larger rectangle.
- b. Write an expression for the area of the smaller rectangle.
- c. Write an equation relating the sum of the areas in parts (a) and (b) to the total area of the figure. Solve the equation to find the value of x .
26. The weight of a bull calf is 388 kilograms. If its weight increases at a rate of $1\frac{2}{5}$ kilograms per day, how long it will take the bull calf to reach a weight of 500 kilograms?

Practice

For use with pages 253-257

Solve the equation by first clearing the fractions.

1. $-\frac{17}{31}x + \frac{7}{31} = \frac{15}{31}$

2. $\frac{1}{12} - \frac{2}{3}x = \frac{1}{3}$

3. $\frac{8}{17}x + \frac{5}{34} = \frac{6}{17}$

4. $\frac{2}{3} = \frac{7}{9}x + \frac{11}{36}$

5. $\frac{1}{6} - \frac{1}{3}x = \frac{2}{3}$

6. $\frac{6}{11} = \frac{1}{4} + \frac{7}{11}x$

7. $\frac{2}{3}x - \frac{1}{6} = \frac{2}{7}$

8. $\frac{7}{20} = \frac{1}{6} + \frac{1}{2}x$

9. $\frac{5}{16} = \frac{1}{6} - \frac{7}{12}x$

Solve the equation by first clearing the decimals.

10. $2.3x + 9.2 = 23$

11. $9.6 - 2.4x = -24$

12. $-3.9 = 2.6x + 1.56$

13. $6.1x + 20.74 = -51.85$

14. $26.4 = 6.6x + 10.56$

15. $4.5x + 15.3 = -38.25$

16. $1.55 = -3.1x - 0.62$

17. $81.9 = 32.76 + 9.1x$

18. $-0.24 = 0.96 - 0.6x$

Practice

For use with pages 253–257

Solve the inequality.

19. $\frac{1}{4} \leq \frac{1}{16} - \frac{1}{2}x$

20. $-\frac{5}{9}x - \frac{1}{9} < \frac{1}{3}$

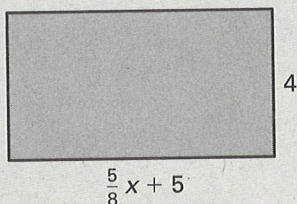
21. $\frac{8}{17}x + \frac{5}{34} > \frac{6}{17}$

22. $\frac{9}{40} - \frac{3}{5}x < \frac{1}{2}$

23. $\frac{1}{5} \leq \frac{1}{15} - \frac{1}{2}x$

24. $\frac{1}{5} \geq \frac{1}{6} - \frac{2}{3}x$

25. Describe the possible values of x if the area of the rectangle is at least 40 square inches.



26. You need to exchange some of your U.S. dollars for European euros (€). For every U.S. dollar, you can get €0.866 in European euros. If you already have €187.22 in European euros, how much in U.S. dollars do you need to exchange to have €360.42 in European euros?