

Chapter 3.4 Proportion: book assignment p. 146 16-31, 49-51

Solve each proportion.

16. $\frac{5}{6} = \frac{c}{9}$

17. $\frac{3}{8} = \frac{x}{30}$

18. $\frac{2}{8} = \frac{n}{20}$

19. $\frac{7}{5} = \frac{k}{18}$

20. $\frac{3}{4} = \frac{x}{10}$

21. $\frac{4}{6} = \frac{m}{9}$

22. $\frac{8}{d} = -\frac{12}{30}$

23. $\frac{5}{9} = \frac{8}{w}$

24. A canary's heart beats 200 times in 12 seconds. Use a proportion to find how many times its heart beats in 42 seconds.

25. Suppose you traveled 66 kilometers in 1.25 hours. Moving at the same speed, how many kilometers would you cover in 2 hours?

Solve each proportion.

26. $\frac{x+3}{4} = \frac{7}{8}$

27. $\frac{a-6}{5} = \frac{7}{12}$

28. $\frac{8}{9} = \frac{w-2}{6}$

29. $\frac{1}{c+5} = \frac{2}{3}$

30. $\frac{8}{b+10} = \frac{4}{2b-7}$

31. $\frac{k+5}{10} = \frac{k-12}{9}$

Data Analysis Below are the survey results of 60 students. These results are representative of the 1250 students in the school. Use the table for Exercises 49–51.

Question	Number Answering Yes
Do you work on weekends?	31
Do you spend 2 or more hours per night on homework?	36
Do you buy lunch in the school cafeteria?	48

49. Predict the number of students in the school who work on weekends.

50. Predict the number of students in the school who spend 2 or more hours per night on homework.

51. Predict the number of students in the school who buy lunch in the school cafeteria.