

Lesson 2-1: Solving Proportions I

Instructions: Solve the proportions below.

- 1)  $\frac{w}{5} = \frac{36}{45}$     2)  $\frac{9}{15} = \frac{3}{x}$     3)  $\frac{3}{10} = \frac{27}{x}$     4)  $\frac{9}{x} = \frac{3}{4}$   
 5)  $\frac{1}{8} = \frac{y}{48}$     6)  $\frac{10}{x} = \frac{2}{8}$     7)  $\frac{2}{3} = \frac{12}{x}$     8)  $\frac{w}{5} = \frac{28}{35}$   
 9)  $\frac{12}{32} = \frac{3}{x}$     10)  $\frac{1}{10} = \frac{n}{50}$     11)  $\frac{w}{50} = \frac{2}{10}$     12)  $\frac{1}{3} = \frac{x}{18}$

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6		40	4
	5		
8		5	18
			12
			10
			6

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- 13)  $\frac{1}{3} = \frac{3}{x}$     14)  $\frac{42}{48} = \frac{n}{8}$     15)  $\frac{1}{5} = \frac{9}{m}$     16)  $\frac{x}{12} = \frac{1}{2}$   
 17)  $\frac{4}{16} = \frac{a}{20}$     18)  $\frac{8}{32} = \frac{7}{b}$     19)  $\frac{3}{4} = \frac{n}{16}$     20)  $\frac{6}{20} = \frac{6}{y}$   
 21)  $\frac{6}{x} = \frac{18}{48}$     22)  $\frac{20}{36} = \frac{n}{18}$     23)  $\frac{72}{80} = \frac{27}{a}$     24)  $\frac{24}{40} = \frac{m}{20}$   
 25)  $\frac{n}{8} = \frac{7}{14}$     26)  $\frac{3}{x} = \frac{6}{48}$     27)  $\frac{16}{32} = \frac{y}{16}$     28)  $\frac{45}{72} = \frac{35}{b}$   
 29)  $\frac{5}{25} = \frac{8}{m}$     30)  $\frac{n}{72} = \frac{18}{81}$     31)  $\frac{14}{x} = \frac{8}{20}$     32)  $\frac{8}{80} = \frac{n}{50}$   
 33)  $\frac{5}{8} = \frac{n}{56}$     34)  $\frac{9}{10} = \frac{54}{y}$     35)  $\frac{n}{45} = \frac{2}{5}$     36)  $\frac{7}{n} = \frac{21}{24}$

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	9	10	16
35	56	8	24
	28	4	16
	5	5	35
			18
			60
			40
			7
			12
			20
30			

Lesson 2-1b: Solving Proportions Application

**Instructions: Answer the questions below.**

- 1) 63 lawyers are hired to handle 90 clients?  
How many lawyers are needed for 10 clients?
  
- 2) One lb of metal is used to make four bolts.  
How many lbs of metal are required for 8 bolts?
  
- 3) Four ounces of fish food will feed 10 fish for two weeks.  
How many ounces will be used to feed five fish for two weeks?
  
- 4) Five tbs. of apple juice are used for four cups of fruit smoothies.  
28 cups of fruit smoothies need how many cups of apple juice?
  
- 5) 219 square feet of paper are used for 300 pamphlets to be printed.  
100 printed pamphlets would require how many square feet of paper?
  
- 6) Seven student(s) selected from a group of eight claimed to have difficulty with math.  
How many student(s) out of a group of 64 have a hard time with math?
  
- 7) 10 brake shoes are completed every two minutes by a machine.  
How many brake shoes are completed in one minute by the same machine?
  
- 8) 10 oranges are required to make every three cup(s) of orange juice.  
If you wanted to make a total of 27 cups of orange juice you would need  
how many oranges?
  
- 9) 66 cups of sugar are used for baking 200 batches of cookies.  
If you wanted to make a total of 100 batches, you used how much sugar?

33

56

2

5

7

90

35

73

2