

Algebra I
Solving Proportions

Solve each proportion by cross multiplying. Round your answer to the nearest hundredth, if needed.

1) $\frac{10}{p} = \frac{9}{10}$

2) $\frac{n}{9} = \frac{10}{8}$

3) $\frac{8}{n} = \frac{7}{3}$

4) $\frac{3}{6} = \frac{x}{5}$

5) $\frac{6}{2} = \frac{10}{n-9}$

6) $\frac{2}{8} = \frac{6}{b+7}$

7) $\frac{9}{5} = \frac{x-9}{8}$

8) $\frac{3}{m+7} = \frac{4}{3}$

9) $\frac{6}{v+4} = \frac{8}{v}$

10) $\frac{9}{3} = \frac{v+9}{v}$

11) $\frac{2}{4} = \frac{n+4}{n}$

12) $\frac{x+7}{10} = \frac{x}{7}$

Set up a proportion to find the missing part in each problem. Solve the proportion and round your answer to the nearest tenth, if needed.

13) What is 18% of 137?

14) What is 44% of 103?

15) 19 is what percent of 125.7?

16) 15% of what is 131.8?

17) 129 is 220% of what?

18) What percent of 15 is 3?

Use a proportion to answer the question in each word problem.

19) James is creating a scale model of the Lincoln Memorial – the building, not just the statue. The building is 99 feet tall, 202 feet wide, and 132 feet deep. If he makes a model that is 2 feet tall, what would the width and depth of his model be?

20) Christyn has a 30% off coupon for the department store. She found four items that she wanted to take home that came to a total of \$45.00 before the coupon is applied. What is her total (before tax) when she uses her coupon?