
Pre-Test

Name _____ Date _____

Use the table below to answer Questions 1 through 3.

Grade	Blue eyes	Brown eyes	Other
8	13	14	3
9	5	18	7
10	9	8	13
11	2	25	3
Total number of students	29	65	26

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1. How many students were surveyed? Use a complete sentence in your answer.
2. Write the ratio of the number of blue-eyed students to the number of students surveyed.
Write the ratio two different ways.
3. Write the ratio of the number of brown-eyed students in the 9th grade to the total number of brown-eyed students. Write the ratio two different ways.

Cognitive Tutor Practice Test

Complete each proportion.

4. $\frac{4}{9} = \frac{\boxed{}}{54}$

5. $\frac{16}{52} = \frac{4}{\boxed{}}$

Solve each proportion using the products of the means and the extremes.
Show all your work.

6. $\frac{2}{7} = \frac{x}{4221}$

7. $\frac{40}{576} = \frac{5}{x}$

Cognitive Tutor Practice Test

8. To make the color orange using food coloring, you must mix 2 drops of red and 3 drops of yellow. Write a ratio that compares the number of drops of red to the total number of drops. Then simplify the ratio, if possible.

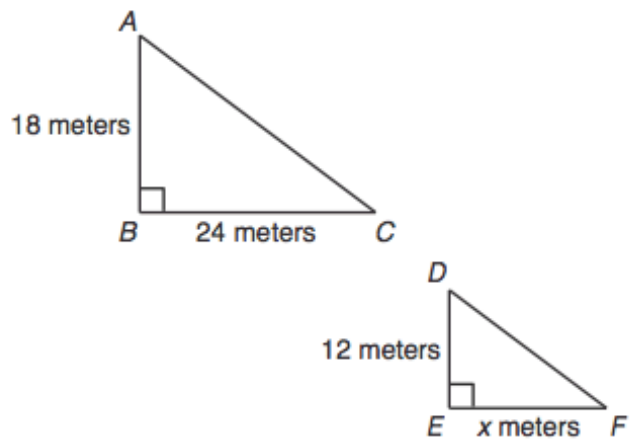
9. Write the given fractions in order from least to greatest. Show all your work and use a complete sentence in your answer.

$$\frac{3}{4}, \frac{5}{9}, \frac{1}{3}$$

Cognitive Tutor Practice Test

10. Bethany can run 1600 meters in 10 minutes. Write a rate to determine the number of meters Bethany can run in one minute.

11. Triangle ABC is similar to triangle DEF .
What is the length of EF ? Show all your work and use a complete sentence in your answer.



12. One mile is equal to 5280 feet. Use a proportion to determine the part of a mile that is equivalent to 3960 feet. Show all your work and use a complete sentence in your answer.