

Name _____ Date _____ Pd _____

Bridge to Algebra 2

7.6 DAY TWO WS

Solve the following. Show work or full thought process to earn full credit.

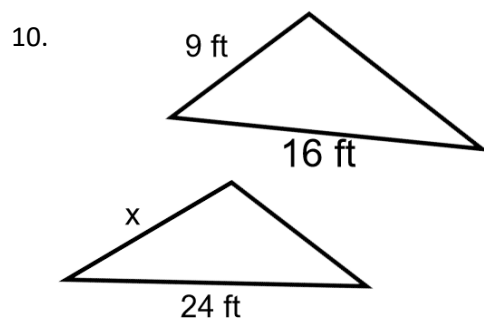
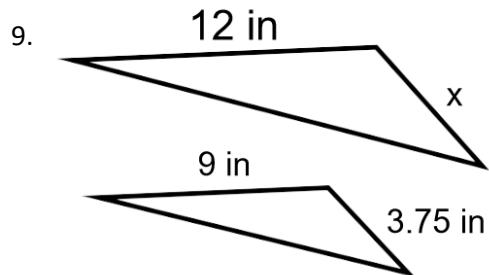
1. Three times the reciprocal of a number equals 9 times the reciprocal of 6. Find the number.
2. If twice a number added to 3 is divided by the number plus 1, the result is three halves. Find the number.
3. A number added to the product of 6 and the reciprocal of the number equals -5 . Find the number.
4. One-fourth equals the quotient of a number and 8. Find the number.
5. Two divided by the difference of a number and 3 minus 4 divided by the number plus 3, equals 8 times the reciprocal of the difference of the number squared and 9. What is the number?
6. An architect is completing the plans for a triangular deck. Use the diagrams below to find the unknown dimension.



7. The quotient of a number and 3, minus 1, equals $\frac{5}{3}$. Find the number.

8. The quotient of a number and 5, minus 1, equals $\frac{7}{5}$. Find the number.

Given that the following pairs of triangles are similar, find each unknown length.



Solve. Show all work for full credit.

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

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