Simplify each expression.

1. $\sqrt{36}$ =

2. $\sqrt{R^2}$ =

3. $\sqrt{64}$ =

4. $\frac{3}{\sqrt{25}}$ =

Simplify these expressions using PARAchute EXpert My Dear Aunt Sally.

5. $4^2 - 3(5 - 2) - 25 + 6$

6. $13 + 49 \div 7 - 2^2$

7. $(3 \times 6^2 - 1) + 11$

8. $3(20 - 4^2) + 2 \times 3$

Simplify and solve for the unknown. Use order of operations as needed. Check your work.

9. $3 + 10 - R + 6R = -3 + 9R + 5 - 5$

10. Check

11. $(-3)^2 + (F + 3^2) = 2 \times 4 + 6$

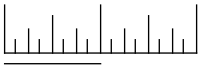
12. Check

13. $-3X + 4X = 2 \cdot 4 - X$

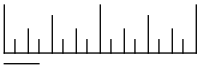
14. Check

Give the length of each line as sixteenths of an inch. Reduce if possible.

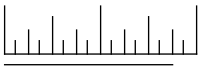
15. 0" 1"



16. 0" 1"

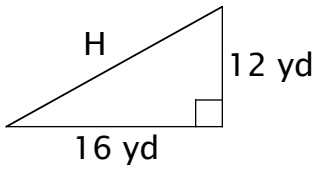


17. 0" 1"

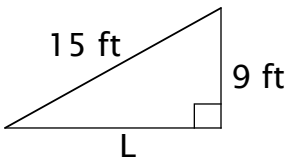


Use the Pythagorean theorem to solve for the unknown side.

18.



19.



Divide. Change any improper fractions to mixed numbers.

20. $\frac{1}{2} \div \frac{1}{6} =$

21. $\frac{7}{8} \div \frac{3}{4} =$

22. $\frac{5}{7} \div \frac{5}{9} =$

Add or subtract. Be sure your answer is reduced.

23. $3\frac{5}{8} + 2\frac{5}{6}$

24. $8 - 1\frac{1}{3}$

25. $9\frac{1}{8} - 5\frac{4}{5}$

26. A triangle has sides of five feet, six feet, and eight feet. Is it a right triangle?

27. Eight times a number, minus five, equals seven times the number, plus five. Write an equation and find the number.

28. Is division commutative?