Name_____ Class_____ Date_____

1-4 Practice

Form G

Solving Equations

Solve each equation.

2. $8.5 = 5p$

3. $\frac{d}{4} = -31$

Solve each equation. Check your answer.

7. $5w + 8 - 12w = 16 - 15w$

8. $3(x + 1) = 2(x + 11)$

Write an equation to solve each problem.

9. Two brothers are saving money to buy tickets to a concert. Their combined savings is $55. One brother has $15 more than the other. How much has each saved?

10. Geometry The sides of a triangle are in the ratio 5 : 12 : 13. What is the length of each side of the triangle if the perimeter of the triangle is 15 inches?

11. What three consecutive numbers have a sum of 126?

Determine whether the equation is *always*, *sometimes*, or *never* true.

12. $6(x + 1) = 2(5 + 3x)$

Solve each formula for the indicated variable.

14. $S = L(1 - r)$, for r

15. $A = lw + wh + lh$, for w

Solve each equation for y.

16. $\frac{4}{9}(y + 3) = g$

17. $a(y + c) = b(y - c)$

18. $\frac{y + 3}{t} = t^2$

Name_____ Class_____ Date _____

1-4 Practice (continued) *Form G*

Solving Equations

Solve each equation.

21. $1.2(x + 5) = 1.6(2x + 5)$

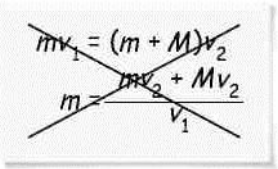
23. $\frac{u}{5} + \frac{u}{10} - \frac{u}{6} = 1$

Solve each formula for the indicated variable.

24. $V = \frac{\pi}{3} r^2 h$, for h

Write an equation to solve each problem.

27. Geometry The sides of one cube are twice as long as the sides of a second cube. What is the side length of each cube if the total volume of the cubes is 72 cm^3?



28. Error Analysis Brenna solved an equation for *m*. Do you agree with her? Explain your answer.

Solve each problem.

31. What four consecutive odd integers have a sum of 336?