

1.6 Practice

Form G

Solving Proportions**Solve each proportion**

1. $\frac{3}{2} = \frac{n}{6}$

2. $\frac{1}{5} = \frac{t}{3}$

3. $\frac{g}{3} = \frac{10}{9}$

4. $\frac{m}{4} = \frac{6}{5}$

5. $\frac{7}{6} = \frac{b}{2}$

6. $\frac{2}{9} = \frac{j}{18}$

7. $\frac{z}{3} = \frac{5}{4}$

8. $\frac{11}{12} = \frac{w}{15}$

9. $\frac{19}{10} = \frac{c}{23}$

Solve each proportion using any method.

10. $\frac{n+4}{-6} = \frac{8}{2}$

12. $\frac{10}{4} = \frac{z-8}{16}$

13. $\frac{3}{t+7} = \frac{5}{-8}$

15. $\frac{x-3}{3} = \frac{x+4}{4}$

16. $\frac{3}{n+1} = \frac{4}{n+4}$

18. $\frac{4d+1}{d+9} = \frac{-3}{-2}$

19. The windows on a building are proportional to the size of the building. The height of each window is 18 in., and the width is 11 in. If the height of the building is 108 ft, what is the width of the building?
20. Eric is planning to bake approximately 305 cookies. If 3 pounds of cookie dough make 96 cookies, how many pounds of cookie dough should he make?
21. On a map, the distance between Sheila's house and Shardae's house is 6.75 inches. According to the scale, 1.5 inches represents 5 miles. How far apart are the houses?

Answers scrambled ☺

2 1/3	9.5	-28	66	0.6	8	22.5	13.75	43.7
48	4.8	4	9	-11.8	5	3 1/3	24	3.75

1.7 Practice

Form G

Solving Multi-Step Inequalities**Solve each inequality. Check your solutions.**

1. $3f + 9 < 21$

2. $4n - 3 \geq 105$

3. $33y - 3 \leq 8$

4. $2 + 2p > -17$

5. $12 > 60 - 6r$

6. $-5 \leq 11 + 4j$

Solve each inequality.

7. $2(k + 4) - 3k \leq 14$

8. $3(4c - 5) - 2c > 0$

9. $15(j - 3) + 3j < 45$

10. $22 \geq 5(2y + 3) - 3y$

11. $-53 > -3(3z + 3) + 3z$

12. $20(d - 4) + 4d \leq 8$

13. $-x + 2 < 3x - 6$

14. $3v - 12 > 5v + 10$

Solve each inequality, if possible. If the inequality has no solution, write *no solution*. If the solutions are all real numbers, write *all real numbers*.

15. $6w + 5 > 2(3w + 3)$

16. $-5r + 15 \geq -5(r - 2)$

17. $-2(6 + s) < -16 + 2s$

18. $9 - 2x < 7 + 2(x - 3)$

19. $2(n - 3) \leq -13 + 2n$

20. $-3(w + 3) < 9 - 3w$

$k \geq -6$	$f < 4$	$z > \frac{22}{3}$	No solution	\mathbb{R}	$y \leq \frac{1}{3}$	$j < 5$	No solution	$d < \frac{11}{3}$	$j \geq -4$
$v < -11$	$r > 8$	$x > 2$	$p > 9.5$	$y \leq 1$	\mathbb{R}	$n \geq 27$	$x > 2$	$s > 1$	$c > 1.5$