



5.02, 5.03

FOR EOG PRACTICE

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## GUIDED PRACTICE

See Example 1 Solve. Then graph each solution set on a number line.

1.  $5x + 3 < 18$       2.  $\frac{z}{7} + 23 \leq -19$       3.  $3y - 4 \geq 14$   
 4.  $\frac{m}{4} - 2 > -3$       5.  $-11p - 13 \geq 42$       6.  $\frac{n}{-3} - 4 > 4$

See Example 2 7. Three students collected more than \$93 washing cars. They used \$15 to reimburse their parents for cleaning supplies. Then they divided the remaining money equally. How much did each student earn?

## INDEPENDENT PRACTICE

See Example 1 Solve. Then graph each solution set on a number line.

8.  $5s - 7 > -42$       9.  $\frac{b}{2} + 3 < 9$       10.  $-2q + 5 \geq 19$   
 11.  $-8c - 11 \leq 13$       12.  $\frac{y}{-4} + 6 > 10$       13.  $\frac{x}{9} - 5 \leq -8$   
 14.  $\frac{r}{-2} - 9 > -14$       15.  $13j + 18 \leq 44$       16.  $\frac{d}{13} - 12 > 27$

See Example 2 17. Rico has \$5.00. Bagels cost \$0.65 each, and a small container of cream cheese costs \$1.00. What is the greatest number of bagels Rico can buy if he also buys one small container of cream cheese?

18. The 35 members of the Tigers drill team are trying to raise at least \$1,200 to cover travel costs to a training camp. If they have already raised \$500, at least how much should each member still raise, on average, to meet the goal?

## PRACTICE AND PROBLEM SOLVING

Solve.

19.  $9 - 2y < 15$       20.  $-3q + 10 < -2$       21.  $\frac{a}{-6} - 5 \geq 4$   
 22.  $-4x + 8 \leq 32$       23.  $0.5 + \frac{n}{5} > -0.5$       24.  $1.4 + \frac{c}{3} < 2$   
 25.  $-\frac{3}{4}b - 2.2 > -1$       26.  $12 + 2w - 8 \leq 20$       27.  $5k + 6 - k \geq -14$   
 28.  $\frac{s}{2} + 9 > 12 - 15$       29.  $4t - 3 - 10t < 15$       30.  $\frac{d}{2} + 1 + \frac{d}{2} \leq 5$
31. Mr. Monroe keeps a bag of small prizes to distribute to his students. He likes to keep at least twice as many prizes in the bag as he has students. The bag currently has 79 prizes in it. If Mr. Monroe has 117 students, at least how many more prizes does he need to buy?



## GUIDED PRACTICE

See Example 1 Solve.

1.  $\frac{w}{8} < -4$

2.  $\frac{z}{-6} \geq 7$

3.  $\frac{p}{-12} > -4$

See Example 2 Solve. Check each answer.

4.  $3m > -15$

5.  $-8y < 11$

6.  $25c \leq 200$

See Example 3 7. It cost Deirdre \$212 to make candles this month. At least how many candles must she sell at \$8 apiece to make a profit?

## INDEPENDENT PRACTICE

See Example 1 Solve.

8.  $\frac{s}{5} > 1.4$

9.  $\frac{m}{-4} < -13$

10.  $\frac{b}{6} > -30$

11.  $\frac{c}{-10} \leq 12$

12.  $\frac{y}{9} < 2.5$

13.  $\frac{x}{1.1} \geq -1$

See Example 2 Solve. Check each answer.

14.  $6w < 4$

15.  $-5z > -3$

16.  $15p \leq -45$

17.  $-9f > 27$

18.  $20k < 30$

19.  $-18n \geq 180$

See Example 3 20. Attendance at a museum more than tripled from Monday to Saturday. On Monday, 186 people went to the museum. At least how many people went to the museum on Saturday?

21. It cost George \$678 to make wreaths. At least how many wreaths must he sell at \$15 apiece to make a profit?

## PRACTICE AND PROBLEM SOLVING

Solve.

22.  $\frac{a}{65} \leq -10$

23.  $0.4p > 1.6$

24.  $-\frac{m}{5} < -20$

25.  $\frac{2}{3}y \geq 12$

26.  $\frac{x}{-9} \leq \frac{3}{5}$

27.  $\frac{g}{2.1} > 0.3$

28.  $\frac{r}{6} \geq \frac{2}{3}$

29.  $4w \leq 1\frac{1}{2}$

30.  $-10n < 10^2$

31.  $-1\frac{3}{5}t > -4$

32.  $-\frac{y}{12} < 3\frac{1}{2}$

33.  $5.6v \geq -14$

34. A community theater group produced 8 plays over the last two years. The group's goal for the next two years is to produce at least  $1\frac{1}{2}$  times as many plays as they did in the two previous years. At least how many plays does the group want to produce in the next two years?