## Notes 1-2

Int 2
One-Step Equations with Rational Coefficients
Unit 1
Solve each equation or inequality. Check your solution. Graph the solution set for inequalities.

1. $t+7.2=1.65$
2. $6=\frac{1}{12} v$
3. $-0.4 \leq g-4.9$
4. $-\frac{2}{3} w=60$

5. $y-\frac{2}{5}=1 \frac{3}{5}$
6. $-\frac{7}{8} k=-21$
7. $-5 \frac{1}{6}=2 \frac{1}{3}+p$
8. $9.6=1.2 b$
9. $2 \frac{3}{4}=x-3 \frac{1}{8}$
10. $0.75 a \geq-9$
11. $-413.4=-15.9 n$
12. $3 \frac{1}{10} s=6 \frac{1}{5}$

Solve each equation. Check your solution.
13. $2 \frac{2}{9}=-\frac{4}{5} m$
18. $-\mathbf{2 2 6 . 8}=\mathbf{2 1 . 6} y$
19. $-\mathbf{3 0}=1.25 c$
14. $-2 \frac{4}{5}<-3 \frac{1}{2} n$
20. $1 \frac{1}{2} x=9 \frac{9}{20}$
15. $-\frac{3}{4} t=5$
21. $-12 \frac{2}{3}=-1 \frac{1}{9} y$
16. $-\frac{2}{9} g=-\frac{7}{9}$
22. $1 \frac{5}{7}=1 \frac{13}{14} a$
17. $\mathbf{0 . 6} w=0.48$

Determine whether each statement is true or false. Explain your reasoning.
23. The product of a fraction and its multiplicative inverse is 1 .
24. A store is having a "half price" sale on notebook computers. Which equation can be used to find the regular price $x$ of a notebook computer that is on sale for $\$ 799$ ?
A. $799 x=0.5$
B. $0.5 x=799$
C. $\frac{1}{799} x=0.5$
D. $\frac{1}{0.5} x=799$
25. Find the Error. Sarah is solving the equation $-\frac{7}{8} x=24$.

Circle her mistake and correct it.

26. Find the Error. Jack is solving the equation $\frac{\mathbf{2}}{\mathbf{9}}=\frac{\mathbf{4}}{\mathbf{5}} \boldsymbol{m}$. Circle his mistake and correct it.

$$
\begin{aligned}
\frac{2}{9} & =\frac{4}{5} m \\
\frac{2}{9} \div \frac{5}{4} & =\frac{4}{5} \div \frac{5}{4} m \\
\frac{8}{45} & =m
\end{aligned}
$$

27. What is the reciprocal of $-\frac{4}{3}$ ?
A. $-1 \frac{1}{3}$
C. $\frac{3}{4}$
B. $-\frac{3}{4}$
D. $1 \frac{1}{3}$
