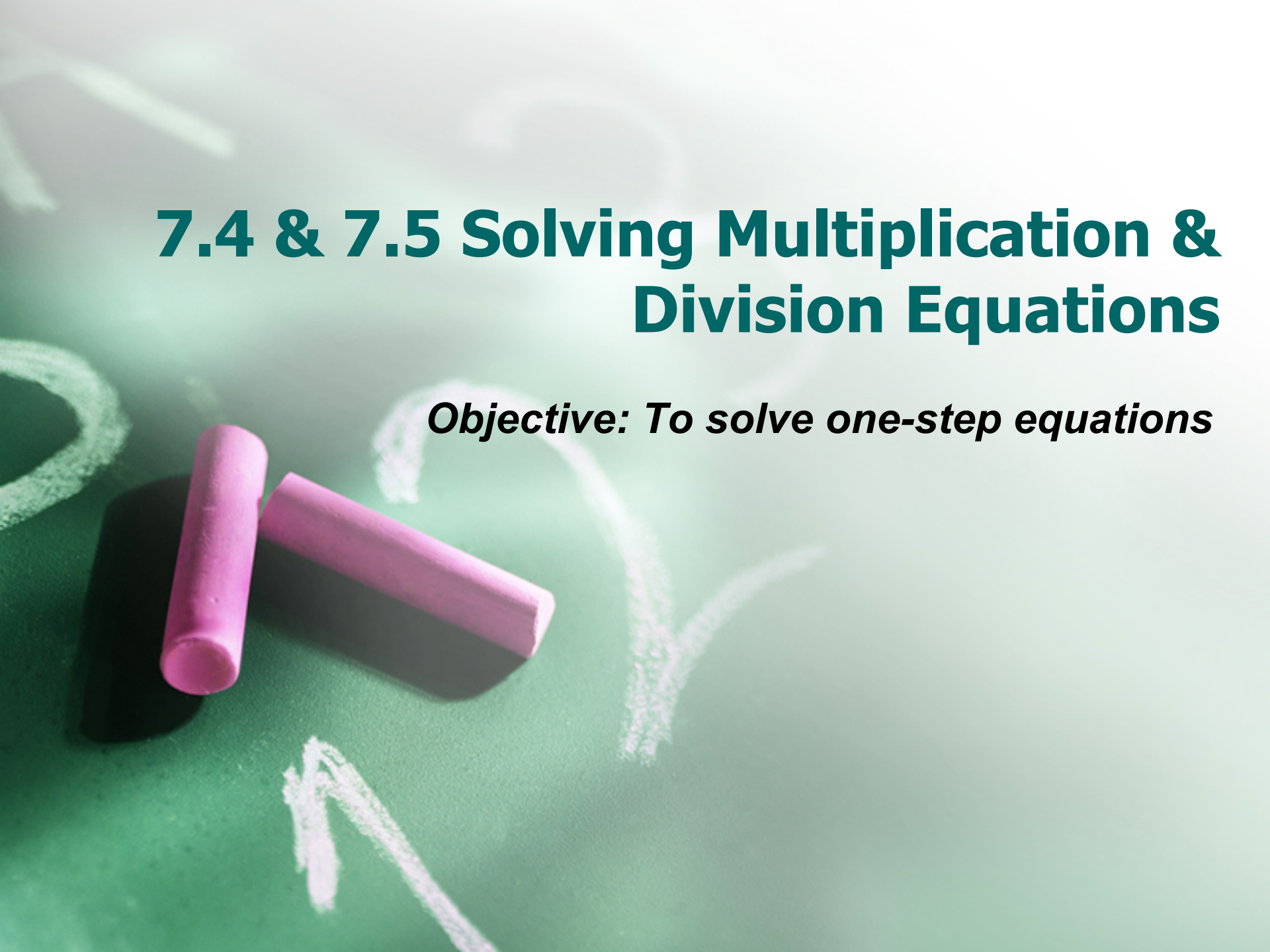

7.4 & 7.5 Solving Multiplication & Division Equations

Objective: To solve one-step equations

Rules for Transforming Equations

- Goal: Isolate the variable on one side of the equations
- Always perform the same operation to both sides of the equation
- To undo an operation, perform its opposite operation

$+ \rightarrow -$

$- \rightarrow +$

$\times \rightarrow \div$

$\div \rightarrow \times$

Solve the Equation

1) $\frac{3x}{3} = \frac{12}{3}$

$x = 4$

2) $\frac{15z}{15} = \frac{45}{15}$

$z = 3$

3) $\frac{24y}{24} = \frac{18}{24}$

$y = 0.75$ or $\frac{3}{4}$

4) $\frac{10.25}{0.5} = \frac{0.5p}{0.5}$

$20.5 = p$

5) $\frac{161}{23} = \frac{23n}{23}$

$7 = n$

6) $\frac{7p}{7} = \frac{52.5}{7}$

$p = 7.5$

7) $\frac{x}{5} = 3$

$5 \cdot \frac{x}{5} = 3 \cdot 5$

$x = 15$

8) $\frac{y}{8} = 7$

$8 \cdot \frac{y}{8} = 7 \cdot 8$

$y = 56$

9) $3 = \frac{z}{4}$

$4 \cdot 3 = \frac{z}{4} \cdot 4$

$12 = z$

10) $\frac{b}{3} = 6.1$

$3 \cdot \frac{b}{3} = 6.1 \cdot 3$

$b = 18.3$

11) $\frac{2}{3}x = 10$

$2 \bullet x \div 3 = 10$

$\bullet 3 \quad \bullet 3$

$\frac{2 \bullet x}{2} = \frac{30}{2}$

$x = 15$

12) $\frac{4}{5}x = 20$

$4 \bullet x \div 5 = 20$

$\bullet 5 \quad \bullet 5$

$\frac{4 \bullet x}{4} = \frac{100}{4}$

$x = 25$