

Numbers 2 * Word Problems 2A

1. A 10 foot board is cut into 2 pieces. Each piece is the same length. How long is each piece?

$$\begin{array}{c} x \qquad x \\ \text{-----|-----} \end{array} \quad 10\text{ft}$$

$2x = 10\text{ft}$ $x = 5\text{ft}$ Check! First = 5ft Second = 5ft Board = 10ft

2. A 15 foot board is cut into 2 pieces. One piece is 3 ft more than the other. How long is each piece?

$$\begin{array}{c} x + 3 \qquad x \\ \text{-----|-----} \end{array} \quad 15\text{ft}$$

$(2x)+3 = 15\text{ft}$ $2x=12\text{ft}$ $x=6\text{ft}$ Check! First = $6+3=9\text{ft}$ Second = 6ft Board = 15ft

3. A 21 foot board is cut into 2 pieces. One piece is twice the other in length? How long is each piece?

$$\begin{array}{c} x + x \qquad x \\ \text{-----|-----} \end{array} \quad 21\text{ft}$$

$(3x) = 21\text{ft}$ $x=7\text{ft}$ Check! First = $7+7=14\text{ft}$ Second = 7ft Board = 21ft

4. A 28 foot board is cut into 2 pieces. One is 4 ft more than twice the other. How long is each piece?

$$\begin{array}{c} x + x + 4 \qquad x \\ \text{-----|-----} \end{array} \quad 28\text{ft}$$

$(3x)+4 = 28\text{ft}$ $3x=24\text{ft}$ $x=8\text{ft}$ Check! First = $8+8+4=20\text{ft}$ Second = 8ft Board = 28ft

5. A 14 foot board is cut into 2 pieces. Each piece is exactly the same length. How long is each piece?

$$\begin{array}{c} x \qquad x \\ \text{-----|-----} \end{array} \quad 14\text{ft}$$

$(2x) = 14\text{ft}$ $x=7\text{ft}$ Check! First = 7ft Second = 7ft Board = 14ft

6. A 13 foot board is cut into 2 pieces. One piece is 1 ft less than the other. How long is each piece?

$$\begin{array}{c} x - 1 \qquad x \\ \text{-----|-----} \end{array} \quad 13\text{ft}$$

$(2x) - 1 = 13\text{ft}$ $2x=14\text{ft}$ $x=7\text{ft}$ Check! First = $7-1=6\text{ft}$ Second = 7ft Board = 13ft

7. A 27 foot board is cut into 2 pieces. One piece is half the other. How long is each piece?

$$\begin{array}{c} x \qquad x + x \\ \text{-----|-----} \end{array} \quad 27\text{ft}$$

$(3x) = 27\text{ft}$ $x=9\text{ft}$ Check! First = 9ft Second $9+9 = 18\text{ft}$ Board = 27ft

8. A 13 foot board is cut into 2 pieces. One is 2 less than half other? How long is each piece?

$$\begin{array}{c} x - 2 \qquad x + x \\ \text{-----|-----} \end{array} \quad 13\text{ft}$$

$(3x) - 2 = 13\text{ft}$ $3x=15\text{ft}$ $x=5\text{ft}$ Check! First = $5-2=3\text{ft}$ Second = $5+5=10\text{ft}$ Board = 13ft