Problem Set

1. Use tape diagrams to calculate the solution of $30 = 5w$. Then, check your answer.

2. Solve $12 = \frac{x}{4}$ algebraically. Then, check your answer.

3. Use tape diagrams to calculate the solution of $\frac{y}{5} = 15$. Then, check your answer.

4. Solve $18z = 72$ algebraically. Then, check your answer.

5. Write a division equation that has a solution of 8. Prove that your solution is correct by using tape diagrams.

6. Write a multiplication equation that has a solution of 8. Solve the equation algebraically to prove that your solution is correct.

7. When solving equations algebraically, Meghan and Meredith each got a different solution. Who is correct? Why did the other person not get the correct answer?

Meghan	Meredith
$\frac{y}{2} = 4$	$\frac{y}{2} = 4$
$\frac{y}{2} \cdot 2 = 4 \cdot 2$	$\frac{y}{2} \div 2 = 4 \div 2$
$y = 8$	$y = 2$