Lesson 27: One-Step Equations—Multiplication and Division

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?

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| **Meghan** | **Meredith** |
| $$\frac{y}{2}=4$$ | $$\frac{y}{2}=4$$ |
| $$\frac{y}{2}∙2=4∙2$$ | $$\frac{y}{2}÷2=4÷2$$ |
| $$y=8$$ | $$y=2$$ |