



2.4 Practice

Classify the following equations as having one solution, no solution, or infinitely many solutions.

1. $2x + 2 = 2x + 5$

2. $x + 7 = x + 7$

3. $y - 5 = y + 5$

Solve

4. $7x + 18x - 3 = 5(5x + 7)$

5. $4(4x + 5) = 18x + 16 - 2x + 4$

6. $8x + 16x - 7 = 6(4x + 10)$

7. $4x + 13x - 4 = 5(4x + 2)$

8. Delta and Southwest Airlines both advertise their prices. Delta's prices are modeled by the expression $28x - 9$, where x is the number of tickets sold. Southwest's prices are modeled by the expression $7(4x + 7)$, where x is the number of tickets sold. When do the two airlines charge the same?

Mixed Review

1. $\frac{z}{4} + 5 = 7 - \frac{z}{4}$

2. Write 0.36 as a fraction in simplest form.

3. Compare $\sqrt{2}$ and 2.4 (Insert $=, < >$)

4. At a dinner the same number of guests are seated at each of 9 large tables. There are 4 guests seated at one small table. Write an equation to represent the total number of guests T and the number of people x at each large table.

5. Using the equation from #4, if there are 94 guests at the dinner, how many are seated at each large table?