

1. $8,500 + 0.09x = 12,000 + 0.05x$

2. $x = -\frac{1}{2}, -5$

3. $(x-3)^2 = 16$

4. unequal irrational numbers.

5. $2\frac{2}{3}$ hours

6. $\frac{3}{5} - \frac{1}{5}i$

7. $x = \frac{-1 \pm \sqrt{11}i}{2}$

8. $x = 39$

9. $x = \pm 4, x = \pm 1$

10. $x > \frac{1}{4}$

11. $(-7, 8)$

12. $(2, 0); (0, -3)$

13. $3\sqrt{5}$

14. $4x^2 = 36$

15. $(12+x)(120-15x) = 1500$