Math 96 Exam 2 Follow Up Problems Spring 2018

1. Write a polynomial equation with integer coefficients that has the roots $x = 7, x = -2$.

2. Solve for $x$ and simplify your answer as much as possible: $x^2 - 3x - 28 = 0$

3. Solve for $x$ and simplify your answer as much as possible: $128x^2 - 50 = 0$

4. Solve for $x$ and simplify your answer as much as possible: $(x + 9)^2 - 49 = 0$

5. Solve for $x$ and simplify your answer as much as possible: $7x^2 = -35x$

6. Solve for $x$ and simplify your answer as much as possible: $x^2 - 3x - 9 = 0$

7. Solve for $x$ and simplify your answer as much as possible: $x(x + 7)(6x - 5) = 0$

8. Solve for $x$ and simplify your answer as much as possible: $7x^2 + 8 = 15x$

9. Solve for $x$ and simplify your answer as much as possible: $64x^2 - 112x = -49$

10. Solve for $x$ and simplify your answer as much as possible: $x^2 = 44$

11. Solve for $x$ and simplify your answer as much as possible: $(x - 11)(x + 2) = -42$

12. Solve for $x$ by completing the square and simplify your answer as much as possible: $x^2 = 14x + 4$

13. Solve for $x$ and simplify your answer as much as possible: $3x^2 + 4x - 5 = 0$

14. Solve for $x$ and simplify your answer as much as possible: $(x - 9)^2 + 4(x - 9) - 21 = 0$

15. Solve for $x$ and simplify your answer as much as possible: $3x^3 - 36x^2 - 84x = 0$

16. Solve for $x$ and simplify your answer as much as possible: $x^2 - 3x^{-1} - 28 = 0$