Complex fractions

Name _____ Date _____

1. $\dfrac{x - \frac{1}{x}}{1 + \frac{1}{x}} =$ _____

2. $\dfrac{x - \frac{16}{x}}{1 + \frac{4}{x}} =$ _____

3. $\dfrac{x - \frac{16}{x}}{1 - \frac{4}{x}} =$ _____

4. $\dfrac{x - \frac{1}{x}}{1 + \frac{1}{x}} =$ _____

5. $\dfrac{1 + \frac{2}{x}}{1 - \frac{5}{x}} =$ _____

6. $\dfrac{x - \frac{64}{x}}{1 - \frac{8}{x}} =$ _____

7. $\dfrac{x - \frac{81}{x}}{1 + \frac{9}{x}} =$ _____

8. $\dfrac{x - \frac{16}{x}}{1 + \frac{4}{x}} =$ _____

9. $\dfrac{\frac{1}{x} - \frac{1}{8}}{x - 8} =$ _____

10. $\dfrac{1 + \frac{2}{x}}{1 - \frac{7}{x}} =$ _____

11. $\dfrac{x - \frac{81}{x}}{1 + \frac{9}{x}} =$ _____

12. $\dfrac{1 - \frac{1}{x}}{1 + \frac{9}{x}} =$ _____

13. $\dfrac{x - \frac{16}{x}}{1 + \frac{4}{x}} =$ _____

14. $\dfrac{x - \frac{49}{x}}{1 - \frac{7}{x}} =$ _____

15. $\dfrac{1 - \frac{2}{x}}{1 - \frac{1}{x}} =$ _____

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16. $\dfrac{\frac{1}{x}-\frac{1}{7}}{x-7}=$ _____

17. $\dfrac{1-\frac{1}{x}}{1+\frac{7}{x}}=$ _____

18. $\dfrac{\frac{1}{x}-\frac{1}{4}}{x-4}=$ _____

19. $\dfrac{x-\frac{4}{x}}{1+\frac{2}{x}}=$ _____

20. $\dfrac{x-\frac{25}{x}}{1+\frac{5}{x}}=$ _____

21. $\dfrac{\frac{1}{x}-6}{\frac{2}{x}+3}=$ _____

22. $\dfrac{\frac{3}{x}-6}{\frac{2}{x}+5}=$ _____

23. $\dfrac{x-\frac{81}{x}}{1+\frac{9}{x}}=$ _____

24. $\dfrac{x-\frac{81}{x}}{1-\frac{9}{x}}=$ _____

25. $\dfrac{\frac{4}{x}-3}{\frac{7}{x}+2}=$ _____

26. $\dfrac{x-\frac{16}{x}}{1+\frac{4}{x}}=$ _____

27. $\dfrac{x-\frac{36}{x}}{1+\frac{6}{x}}=$ _____

28. $\dfrac{x-\frac{25}{x}}{1-\frac{5}{x}}=$ _____

29. $\dfrac{\frac{1}{x}-\frac{1}{2}}{x-2}=$ _____

30. $\dfrac{1+\frac{6}{x}}{1+\frac{2}{x}}=$ _____