Pre-Calculus

Simplifying Fractions

Name _____ Date _____

1. $\frac{1}{10} + \frac{3}{10} =$ _____

2. $\frac{3}{16} + \frac{7}{16} =$ _____

3. Simplify: $\frac{4}{9} + \frac{7}{9}$

4. Simplify: $\frac{3}{5} + \frac{5}{6}$

5. Simplify: $\frac{1}{6} + \frac{5}{8}$

6. Simplify: $\frac{11}{8} - \frac{1}{8}$

7. Simplify: $\frac{5}{8} - \frac{2}{5}$

8. Simplify: $\frac{3}{5} - \frac{2}{11}$

9. $5\frac{2}{9} - 2\frac{5}{6} =$ _____

10. Simplify: $\frac{1}{2} \times \frac{3}{5}$

11. Simplify: $\frac{2}{3} \cdot \frac{5}{9}$

12. What is $\frac{4}{15} \times \frac{10}{12}$?

13. Simplify: $4 \times \frac{3}{15}$

14. Simplify: $3\frac{3}{5} \cdot 1\frac{2}{3}$

15. Simplify: $\frac{3}{5} \div \frac{1}{3}$

16. $\frac{12}{25} \div \frac{9}{10} =$ _____

17. What is $8 \div \frac{4}{5}$?

18. Simplify: $3\frac{1}{2} \div 14$

19. Simplify: $\dfrac{\frac{15}{16}}{\frac{3}{8}}$

20. Simplify: $\dfrac{m^2}{m+6} + \dfrac{6m}{m+6}$?

21. Find the sum of $\dfrac{x+1}{2}$ and $\dfrac{x}{3}$.

22. Simplify the expression $\dfrac{k}{3} + \dfrac{1}{k}$.

23. Find the sum $\dfrac{2x-5}{x} + \dfrac{x-1}{2x}$, and express in lowest terms.

24. Find the expression that is equivalent to $\dfrac{-1}{x^2} + \dfrac{3}{xy}$.

25. Simplify: $\dfrac{9}{y} - \dfrac{3}{y}$

26. Simplify $\dfrac{15}{z} - \dfrac{25}{z}$ and express in lowest terms.

27. Simplify: $\dfrac{6}{y^2} - \dfrac{2}{y}$

28. Find the difference $\dfrac{4}{3} - \dfrac{1}{y}$, and express in lowest terms.

29. Simplify: $\dfrac{5-4r}{8} - \dfrac{2-3r}{6}$

30. Simplify: $\dfrac{8}{x-2} - \dfrac{4}{x+2}$

31. Simplify: $\dfrac{3m}{4n} \cdot \dfrac{2n}{5m^2}$

32. Simplify: $5ab^2 \cdot \dfrac{b}{10a}$

33. Simplify the expression: $\left(\dfrac{3xy^2}{5ab^3}\right)\left(\dfrac{10a^2b}{xy^3}\right)$

34. Find the product $\dfrac{7x^2y}{14xy^2} \cdot \dfrac{4x}{3y}$ expressed in lowest terms.

35. Simplify the expression $\dfrac{9}{x^2-16} \cdot \dfrac{4-x}{21}$.

Remember to Show your work.