

Chapter 2 Section 5: Operations with Fractions and Variables

Problems

Simplify each of the following.

1. $\frac{16}{20} = \underline{\hspace{2cm}}$

2. $\frac{8}{12} = \underline{\hspace{2cm}}$

3. $\frac{13}{39} = \underline{\hspace{2cm}}$

4. $\frac{1}{3} \times \frac{2}{5} = \underline{\hspace{2cm}}$

5. $\frac{-4}{9} \times \frac{1}{2} = \underline{\hspace{2cm}}$

6. $\frac{5}{-3} \times \frac{-5}{3} = \underline{\hspace{2cm}}$

7. $\frac{1}{7} \times 7 = \underline{\hspace{2cm}}$

8. $\frac{-3}{13} \times 39 = \underline{\hspace{2cm}}$

9. $\frac{3}{5} \times \frac{-3}{7} = \underline{\hspace{2cm}}$

10. $\frac{-3}{7} \times \frac{4}{-2} = \underline{\hspace{2cm}}$

11. $\frac{6}{7} \times \frac{-5}{9} = \underline{\hspace{2cm}}$

12. $\left(\frac{2}{5}\right)\left(\frac{-3}{-4}\right) = \underline{\hspace{2cm}}$

13. $\frac{25}{9} \cdot \frac{15}{25} = \underline{\hspace{2cm}}$

14. $\frac{3}{4} \cdot \frac{a}{2} = \underline{\hspace{2cm}}$

15. $\frac{5}{m} \cdot \frac{2}{3} = \underline{\hspace{2cm}}$

16. $\frac{x}{y} \cdot \frac{a}{2} = \underline{\hspace{2cm}}$

17. $\frac{3}{x} \cdot \frac{a}{b} = \underline{\hspace{2cm}}$

18. $\frac{\frac{-1}{2}}{\frac{3}{4}} = \underline{\hspace{2cm}}$

19. $\frac{\frac{3}{7}}{\frac{-1}{4}} = \underline{\hspace{2cm}}$

20. $\frac{a}{b} \div \frac{-2}{3} = \underline{\hspace{2cm}}$

21. $\frac{\frac{4}{-5}}{\frac{2}{3}} = \underline{\hspace{2cm}}$

22. $\frac{3}{7} \div \frac{-a}{b} = \underline{\hspace{2cm}}$

23. $\frac{-3}{5} \div \frac{2}{7} = \underline{\hspace{2cm}}$

24. $\frac{\frac{-1}{3}}{\frac{-2}{3}} = \underline{\hspace{2cm}}$

25. $\frac{-x}{y} \div \frac{x}{-y} = \underline{\hspace{2cm}}$

26. $\frac{\frac{ab}{3}}{\frac{2}{3}} = \underline{\hspace{2cm}}$

27. $\frac{-x}{y} \div \frac{3}{5} = \underline{\hspace{2cm}}$

28. $\frac{2}{3} + \frac{-2}{3} = \underline{\hspace{2cm}}$

29. $\frac{2}{3} - \frac{7}{3} = \underline{\hspace{2cm}}$

30. $-\frac{5}{8} - \frac{3}{8} = \underline{\hspace{2cm}}$

31. $\frac{a}{5} - \frac{4}{5} =$ _____

32. $\frac{7}{b} + \frac{3}{b} =$ _____

33. $\frac{1}{3} + \frac{2}{5} =$ _____

34. $\frac{3}{4} - \frac{5}{6} =$ _____

35. $\frac{a}{6} - \frac{b}{5} =$ _____

36. $\frac{4}{b} - \frac{7}{a} =$ _____

37. $\frac{1}{10} + \frac{2}{15} =$ _____

38. $\frac{3}{14} + \frac{5}{21} =$ _____

39. $\frac{3}{8} + \frac{5}{22} =$ _____

40. $\frac{5}{12} - \frac{3}{9} =$ _____

41. $\frac{b}{15} - \frac{c}{9} =$ _____

42. $\frac{3}{b} - \frac{2}{a} =$ _____