ACT COMPASS Preparation Worksheet

Pre-algebra: Basic Operations (Fractions)

1. $6\left(\frac{4}{3}\left(1+\frac{1}{7}\right)\right) \div \frac{13}{10} = ?$

2. $\left(\frac{3}{2} \times 3\frac{1}{2}\right) \div \left(\frac{6}{5} - 1\right) = ?$

3. $\left(\frac{2}{3} + \frac{7}{5} + \frac{11}{6}\right) \times 2\frac{1}{4} = ?$

4. $\frac{3}{2} + 1^3 + 1\frac{1}{10} = ?$

5. $(4\frac{9}{10} - 1)^3 \div 2\frac{1}{6} = ?$

6. $\left(\frac{4}{3} - \frac{1}{2}\right) \div \frac{5}{3} \times 1\frac{3}{4} = ?$

Write the decimal equivalent beside each fraction.

7. 7/9 = ?

8. 7/8 = ?

9. 5/7 = ?

10. 4/7 = ?

11. 2/8 = ?

12. 3/5 = ?

13. 5/11 = ?

14. 10/12 = ?

15. 6/11 = ?

Write the fraction for each decimal.

16. 0.714285… = ?

17. 0.5 = ?

18. 0.0909… = ?

19. 0.888… = ?

20. 0.25 = ?

21. 0.142857… = ?

22. 0.08333…= ?

23. 0.571428… = ?

24. 0.857142… = ?

25. Anna's recipe for apple fritters makes eighteen fritters and uses two-thirds of a cup of milk. Anna wants to make six fritters. How much milk will she need?

26. Natalie is making chocolate milkshakes for Nicole's birthday party. There will be fourteen people at the party. It takes a third of a cup of milk to make one chocolate milkshake. How many cups of milk will it take to make fourteen milkshakes?

27. The Smith family went to a hockey game last weekend. They spent $12 on food, $41 on souvenirs, and $9 on drinks. What fraction of their expenditures was spent on drinks?

Created by Stephanie Braun, Academic Skills Center Manager, on 4/20/10

Find the missing number in the equivalent fractions below.

28. $\frac{\quad}{7} = \frac{3}{21}$

29. $\frac{1}{11} = \frac{4}{\quad}$

30. $\frac{\quad}{9} = \frac{15}{45}$

31. $\frac{\quad}{12} = \frac{16}{24}$

32. $\frac{3}{\quad} = \frac{15}{20}$

33. $\frac{2}{7} = \frac{\quad}{35}$

34. $\frac{6}{11} = \frac{\quad}{44}$

35. $\frac{3}{\quad} = \frac{12}{20}$

36. $\frac{\quad}{2} = \frac{2}{4}$

37. $\frac{\quad}{9} = \frac{12}{27}$

38. $\frac{4}{9} = \frac{20}{\quad}$

39. $\frac{9}{10} = \frac{\quad}{50}$

40. $\frac{\quad}{9} = \frac{40}{45}$

41. $\frac{7}{9} = \frac{21}{\quad}$

42. $\frac{\quad}{10} = \frac{12}{20}$

43. $\frac{\quad}{5} = \frac{2}{10}$

44. $\frac{3}{\quad} = \frac{9}{33}$

45. $\frac{\quad}{4} = \frac{4}{8}$

46. $\frac{5}{6} = \frac{25}{\quad}$

47. $\frac{5}{10} = \frac{\quad}{40}$

48. $\frac{\quad}{11} = \frac{12}{22}$

49. $\frac{4}{6} = \frac{\quad}{12}$

50. $\frac{3}{10} = \frac{\quad}{20}$

51. $\frac{2}{\quad} = \frac{6}{33}$