7A – Exercises – Chapter 3

Name Answer Key

Hour _____

Lesson 3.1 Practice — *Fractions and Decimals*

Write each fraction as a decimal. Use a bar to show a repeating decimal.

1. $-\frac{7}{9}$

$\boxed{-0.\overline{7}}$

2. $\frac{2}{11}$

$\boxed{0.\overline{18}}$

3. $\frac{27}{40}$

$\boxed{0.675}$

4. $\frac{5}{99}$

$\boxed{0.\overline{05}}$

Replace each ● with <, >, or = to make a true sentence.

5. $\frac{5}{8}$ ● $\frac{6}{9}$

$\frac{5}{8} < \frac{6}{9}$

6. $-\frac{11}{40}$ ● -0.02

$-\frac{11}{40} < -0.02$

7. 0.16 ● $\frac{4}{25}$

$0.16 = \frac{4}{25}$

Lesson 3.2 Practice — *Rational Numbers*

Write each number as a fraction.

8. $6\frac{8}{11}$

$\boxed{\frac{74}{11}}$

9. 0.7

$\boxed{\frac{7}{10}}$

10. -9.08

$\boxed{-9\frac{2}{25}}$

Identify all sets to which each number belongs.

11. 8.5

Rational

12. 582

Natural
Whole
Integer
Rational

13. -12

Integer
Rational

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Lesson 3.3 Practice *Multiplying Rational Numbers*

Find each product. Write in simplest form.

14. $-2\frac{1}{8} \bullet \left(-4\frac{4}{7}\right)$

$\boxed{9\frac{5}{7}}$

15. $\frac{4}{5} \bullet \frac{5}{8}$

$\boxed{\frac{1}{2}}$

16. $2\frac{4}{9} \bullet \left(-3\frac{6}{11}\right)$

$\boxed{-8\frac{2}{3}}$

17. $-\frac{3}{10} \bullet \left(-\frac{1}{4}\right)$

$\boxed{\frac{3}{40}}$

Evaluate each expression if $x = \frac{7}{10}$, $y = -4\frac{2}{5}$, and $-\frac{4}{7}$. Write the product in simplest form.

18. xy

$\boxed{-3\frac{2}{25}}$

19. $5\frac{5}{6}xz$

$\boxed{-2\frac{1}{3}}$

20. xyz

$\boxed{1\frac{19}{25}}$

Lesson 3.4 Practice *Dividing Rational Numbers*

Find each quotient. Write in simplest form.

21. $\frac{5}{6} \div \frac{5}{8}$

$\boxed{\frac{4}{3} = 1\frac{1}{3}}$

22. $\frac{7}{9} \div \frac{2}{3}$

$\boxed{\frac{7}{6} = 1\frac{1}{6}}$

23. $\frac{16}{21} \div \left(-\frac{2}{7}\right)$

$\boxed{-\frac{8}{3} = -2\frac{2}{3}}$

24. $-4\frac{5}{8} \div \left(-3\frac{1}{3}\right)$

$\boxed{1\frac{31}{80}}$

25. $\frac{18}{21} \div 3$

$\boxed{\frac{2}{7}}$

26. $\frac{2x}{y} \div \frac{3}{y}$

$\boxed{\frac{2x}{3}}$

27. $\frac{15yz}{6x} \div \frac{10z}{3x}$

$\boxed{\frac{3y}{4}}$

28. $\frac{m}{9} \div \frac{mn^2}{3}$

$\boxed{\frac{1}{3n^2}}$

29. $\frac{de}{20f} \div \frac{3}{2f}$

$\boxed{\frac{de}{30}}$

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Lesson 3.5 Practice

Adding and Subtracting Like Fractions

Find each sum. Write in simplest form.

30. $\frac{11}{12} + \frac{9}{12}$

$\boxed{1\frac{2}{3}}$

31. $-6\frac{7}{12} + \left(-8\frac{11}{12}\right)$

$\boxed{-15\frac{1}{2}}$

32. $2\frac{3}{5} + \left(-\frac{1}{5}\right)$

$\boxed{2\frac{2}{5}}$

Find each difference. Write in simplest form.

33. $\frac{19}{20} - \frac{17}{20}$

$\boxed{\frac{1}{10}}$

34. $\frac{23}{25} - \frac{8}{25}$

$\boxed{\frac{3}{5}}$

35. $\frac{4}{12} - \frac{7}{12}$

$\boxed{-\frac{1}{4}}$

Lesson 3.6 Practice

Adding and Subtracting Unlike Fractions

Find each sum. Write in simplest form.

36. $\frac{8}{9} + \frac{2}{5}$

$\boxed{1\frac{13}{45}}$

37. $-\frac{2}{3} + \frac{1}{4}$

$\boxed{-\frac{5}{12}}$

38. $-7\frac{1}{2} + \left(-3\frac{2}{9}\right)$

$\boxed{-10\frac{13}{18}}$

Find each difference. Write in simplest form.

39. $\frac{3}{8} - \frac{1}{12}$

$\boxed{\frac{7}{24}}$

40. $-\frac{7}{9} - \frac{4}{5}$

$\boxed{-1\frac{26}{45}}$

41. $10\frac{5}{6} - \left(-5\frac{2}{3}\right)$

$\boxed{16\frac{1}{2}}$