Unit 3 – Fractions, Decimals & Percent

Grade 7 Mathematics Exam Review

1. Write $\frac{8}{25}$ as a decimal.

2. Write
$$\frac{18}{20}$$
 as a decimal.

3. Write
$$\frac{19}{25}$$
 as a decimal.

4. Write
$$\frac{22}{15}$$
 as a decimal.

5. Write
$$\frac{1}{8}$$
 as a decimal.

6. Write $\frac{17}{8}$ as a decimal. Identify the decimal as terminating or repeating.

7. Write
$$\frac{15}{20}$$
 as a decimal. Identify the decimal as terminating or repeating.

8. Write
$$\frac{30}{54}$$
 as a decimal. Identify the decimal as terminating or repeating.

Write 0.52 as a fraction in simplest form.

Write 0.192 as a fraction in simplest form.

12. What is the least number in the set?
$$\frac{2}{3}$$

$$\frac{2}{3}, \frac{3}{4}, \frac{5}{8}, \frac{1}{2}$$

13. What is the greatest number in the set? $\frac{7}{6}$, $\frac{7}{4}$, $\frac{5}{3}$, $\frac{3}{2}$

$$\frac{7}{6}, \frac{7}{4}, \frac{5}{3}, \frac{3}{2}$$

14. What is the greatest number in the set?

$$\frac{1}{2}$$
, $\frac{3}{4}$, $\frac{5}{6}$, $\frac{2}{3}$

$$\frac{1}{8}$$
, $\frac{1}{6}$, $\frac{1}{4}$, $\frac{1}{3}$

$$\frac{5}{2}$$
, $\frac{13}{6}$, $\frac{9}{4}$, $\frac{19}{8}$

$$2\frac{1}{6}$$
, $2\frac{1}{3}$, $2\frac{1}{2}$, $1\frac{2}{3}$

$$\frac{3}{2}$$
, $1\frac{3}{10}$, $\frac{5}{3}$, $1\frac{2}{5}$

$$\frac{7}{2}$$
, $3\frac{1}{4}$, 3.15, 3.2

$$\frac{5}{3}$$
, $1\frac{1}{2}$, $2\frac{1}{6}$, $\frac{9}{4}$

$$6.038 + 1.568$$

$$5.023 - 2.38$$

$$2.748 + 3.59$$

$$9.123 - 5.83$$

$$12.25 - 7.655$$

$$0.784 + 23.5 + 4.9$$

$$0.855 + 0.793 + 0.699$$

30. Copy and complete.

$$c - 1.63 = 2.54$$

31. Calculate.

$$10.35 + 6.21 - 0.6$$

32. Calculate.

$$6.35 - 3.91 + 1.53$$

33. Find the next two terms in the pattern.

0.257, 0.368, 0.479, 0.59,...

34. Add.

$$0.9 + 0.99 + 0.999$$

35. Multiply.

$$0.35 \times 19$$

36. Multiply.

 7.95×0.02

37. Multiply.

 0.6×0.6

38. Determine the cost of 3.98 kg apples at \$1.15/kg.

39. Each sash is 1.25 m long. How much ribbon is needed to make 25 sashes?

40. What is the area of a rectangle 13.5 cm long and 3.4 cm wide?

41. Estimate the quotient.

42. Divide.

$$1.4 \div 10$$

$$0.56 \div 0.8$$

$$1.62\,\div\,0.3$$

$$50.1 \div 0.6$$

- **46.** Divide. Round your answer to the nearest tenth. $8.5 \div 0.3$
- **47.** Replace \square with a number to make 4, \square = 5 a true sentence.
- **48.** Which of the following is correct?
 - i) $67.2 \div 0.4 = 168$
 - ii) $67.2 \div 0.4 = 16.8$
 - iii) $67.2 \div 0.4 = 1.68$
 - iv) $67.2 \div 0.4 = 1680$
- **49.** How many pieces of ribbon 0.8 m long can be cut from 20 m of ribbon?
- **50.** Evaluate.

 $3.1 + 5 \times 2.2$

51. Evaluate.

 $25.8 - 3 \times 2.5$

52. Evaluate.

 $25.3 - 13.5 \div 5$

53. Evaluate.

 $5.2 + 1.7 \times 3 + 2.6$

54. Evaluate.

 $5.1 \times 6 - 3.5 \times 2.2$

55. Use a calculator to evaluate.

 $8.28 \div 2.3 - 1.8$

56. Evaluate.

 $6 \times 18 \div 6$

57. Evaluate.

 $3.5 \times 4.6 - 3.4$

58. Evaluate.

 $12.7 - 3.7 \div 0.5 + 2.3$

59. Evaluate.

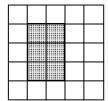
 $3.5 \times 4.8 - 2.8 \times 2.5$

60. Evaluate.

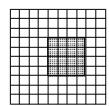
 $8.1 \times (3.2 - 2.2)$

61. Write 8% as a decimal.

- **62.** Write $\frac{4}{5}$ as a percent.
- **63.** Write $\frac{39}{50}$ as percent.
- **64.** Write 0.18 as a percent.
- **65.** What fraction of the diagram is shaded? Write the fraction as a percent.

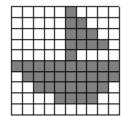


66. What fraction of the diagram is shaded? Write the fraction as a percent.

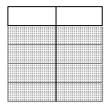


- **67.** Write 28% as a fraction in simplest form.
- **68.** Write 0.16 as a fraction in simplest form.
- **69.** In the small country of Varia, a bill becomes law only if $\frac{30}{50}$ of the senators approve it. Write this fraction as a percent.
- 70. At the Mega Theater, 8 out of the 25 movies this month are comedies. What percent of the movies are comedies?
- **71.** Write 72% as a decimal.
- 72. Write $\frac{1}{20}$ as a percent.
- **73.** Write 0.42 as a percent.

74. What fraction of the diagram is shaded? Write the fraction as a percent.



75. What fraction of the diagram is shaded? Write the fraction as a percent.



- **76.** Emma has read 11 of the 22 books on her reading list. What percent of the books has she read?
- 77. In your last 20 basketball games, you attempted 56 free throws and made 28 of them. Express your success in making free throws as a percent.
- **78.** There are 80 calories in a candy bar. 32 calories are from sugar. What percent of the calories are from sugar?
- **79.** Calculate 60% of 80.
- **80.** Calculate 50% of 20.
- **81.** There were 10 students on a field trip. While outside, 70% of the students wore jackets. How many students wore jackets?
- **82.** Calculate 30% of 42.
- **83.** Calculate 80% of 50.
- **84.** Calculate 78% of 25.
- **85.** Calculate 50% of 909.
- **86.** Find 80% of \$1000.
- **87.** Everyone in Stuart's class has to do a science project. Out of the 50 students, 74% have completed their projects. How many students have completed their projects?

- **88.** Of the 235 students at Central Middle School, 40% are members of the math club. How many students are in the math club?
- **89.** Kevin earned \$160 babysitting. He saved 45% of his money. How much did he save?
- **90.** Liam wants to buy a bicycle that costs \$290.00. His parents ask Liam to raise 40% of the money. How much does Liam have to raise?
- **91.** Tamika makes a 6.5% commission selling electronics. She sells a flat-screen TV for \$6500. How much commission does she make?
- **92.** Sales tax in one province is 9%. What is the amount of tax on a \$48.00 purchase?
- 93. The value of an appliance is estimated to decrease by 25% per year. The original price of an appliance is \$1000. What will be the value of the appliance after a year?

Unit 3 - Answer Key

1. 0.32

2. 0.9

3. 0.76

4. 1.4¯6

5. 0.125

6. 2.125; terminating

7. 0.75; terminating

8. $0.\overline{5}$; repeating

9. $\frac{13}{25}$

10. $\frac{11}{40}$

11. $\frac{24}{125}$

12. $\frac{1}{2}$

13. $\frac{7}{4}$

14. $\frac{5}{6}$

15. $\frac{1}{8}$

16. $\frac{13}{6}$

17. 0.24

18. 0.32

19. $2\frac{1}{2}$

20. $1\frac{3}{10}$

21. 3.15

22. $2\frac{1}{6}$

23. 7.606

24. 2.643

25. 6.338

26. 3.293

27. 4.595

28. 29.184

29. 2.347

30. 4.17

31. 15.96

32. 3.97

33. 0.701, 0.812

34. 2.889

35. 6.65

36. 0.159

37. 0.36

38. \$4.58

39. 31.25 m

40. 45.9 cm²

41. 19.8

42. 0.14

43. 0.7

44. 5.4

45. 83.5

46. 28.3

47. 0.8

48. i

49. 25

50. 14.1

51. 18.3

52. 22.6

53. 12.9

54. 22.9

55. 1.8

56. 18

57. 12.7

58. 7.6

59. 9.8

60. 8.1

61. 0.08

62. 80%

63. 78%

64. 18%

65. $\frac{6}{25}$, 24%

66. $\frac{16}{100}$, 16%

67. $\frac{7}{25}$

68. $\frac{4}{25}$

- **69.** 60%
- **70.** 32%
- **71.** 0.72
- **72.** 5%
- **73.** 42%
- **74.** $\frac{41}{100}$, 41%
- 75. $\frac{8}{10}$; 80%
- **76.** 50.0%
- **77.** 50%
- **78.** 40%
- **79.** 48
- **80.** 10
- **81.** 7 students
- **82.** 12.6
- **83.** 40
- **84.** 19.5
- **85.** 454.5
- **86.** \$800.00
- **87.** 37 students
- **88.** 94 students
- **89.** \$72
- **90.** \$116.00
- **91.** \$422.5
- **92.** \$4.32
- **93.** \$750.00