

Math 20 Final Exam Review

- Multiply: 809×948
a) 16,989 b) 756,832 c) 766,932 d) 168,189
- Divide: $53,802 \div 854$
a) 63 b) 513 c) 62.10 d) 51.3
- Add: $4\frac{7}{15} + 2\frac{2}{3}$
a) $6\frac{1}{2}$ or $\frac{13}{2}$ b) $7\frac{2}{15}$ or $\frac{107}{15}$ c) $6\frac{3}{5}$ or $\frac{33}{5}$ d) 5
- Subtract: $\frac{13}{15} - \frac{9}{20}$
a) $\frac{5}{12}$ b) $-\frac{4}{5}$ c) $\frac{2}{30}$ d) $\frac{25}{0}$
- Multiply & Simplify: $\frac{5}{9} \cdot \frac{20}{28} \cdot \frac{3}{25}$
a) $\frac{5}{35}$ b) $\frac{5}{105}$ c) $\frac{1}{21}$ d) $\frac{300}{6300}$
- Divide: $11\frac{1}{5} \div 12\frac{3}{5}$
a) $132\frac{1}{3}$ b) $\frac{3528}{25}$ c) $141\frac{3}{25}$ d) $\frac{8}{9}$
- Subtract: $693.2 - 413.98$
a) 289.22 b) 280.78 c) 344.66 d) 279.22
- Multiply: $6.1 \cdot 1000$
a) 61 b) 6100 c) 610 d) 61000
- Subtract: $-19 - (-3)$
a) -22 b) -16 c) 22 d) 16
- Divide: $-56 \div (-8)$
a) -7 b) 6 c) 7 d) 8
- Divide: $15 \div 0$
a) 0 b) 15 c) 1 d) undefined
- Round the following to the nearest ten, hundred, and thousand: 95,790
a) ten – 95,790 b) ten – 95,790 c) ten – 90 d) ten – 90
hundred – 95,800 hundred – 95,700 hundred – 800 hundred - 700
thousand – 96,000 thousand – 95,000 thousand – 6,000 thousand – 5,000

13. Round the following to the nearest tenth and thousandth: 93.7688
 a) tenth – 93.8 b) tenth – 93.7 c) tenth - .8 d) tenth - .7
 thousandth – 93.769 thousandth – 93.768 thousandth - .769 thousandth - .768
14. Use the order of operations to solve: $8 \cdot 4 + 2 - 5(9 - 4)$
 a) -15 b) 17 c) 23 d) 9
15. Use the order of operations to solve: $(7 - 4)(4)(-3) + 6|7 - 9|$
 a) -24 b) -48 c) -3 d) 67
16. Use the order of operations to solve: $\frac{4}{3} + \left(\frac{3}{2}\right)^2 - \frac{3}{8}$
 a) $\frac{59}{24}$ b) $\frac{10}{-1}$ c) $\frac{77}{24}$ d) $\frac{59}{56}$
17. Use the order of operations to solve: $3(5.4 - 3.6) - (1.2)^2 - 2(1.6)$
 a) -0.2 b) 7.96 c) 3.64 d) 0.76
18. Solve: $4x - 16 = 12$
 a) $x = 18$ b) $x = 7$ c) $x = 24$ d) $x = -1$
19. Solve: $\frac{x}{3} - 7 = 4$
 a) $x = 19$ b) $x = 33$ c) $x = -9$ d) $x = \frac{11}{3}$
20. Solve: $45 = 6x + 9$
 a) $x = 6$ b) $x = -\frac{4}{3}$ c) $x = 30$ d) $x = 9$
21. Solve: $0.4x + 0.2 = -3.6 - 0.6x$
 a) $x = -38$ b) $x = 3.8$ c) $x = -3.8$ d) $x = 0$
22. Solve the proportion: $\frac{4}{9} = \frac{48}{x}$
 a) $x = \frac{64}{3}$ b) $x = 108$ c) $x = 12$ d) $x = \frac{1}{12}$
23. Solve the proportion: $\frac{3.69}{x} = \frac{12.3}{14.2}$
 a) $x = 4260$ b) $x = 3.19$ c) $x = 4.26$ d) $x = 42.6$
24. Write the following number using digits: eight thousand, one hundred sixty-seven
25. Write the following number in words: 135,060
26. Determine whether the number is divisible by 2, 3, 4, 5, 6, 7, 8, 9, and/or 10: 2,262
27. Find the mean for the list of numbers. If necessary, round to the nearest whole number:
 4, 6, 9, 4, 13, 8
 a) 7.3 b) 4 c) 8 d) 7

28. From the given list, identify the improper fractions: $\frac{59}{3}, \frac{2}{38}, \frac{5}{6}, \frac{38}{18}, \frac{49}{49}$
- a) $\frac{59}{3}, \frac{38}{18}, \frac{49}{49}$ b) $\frac{2}{38}, \frac{5}{6}, \frac{49}{49}$ c) $\frac{59}{3}, \frac{38}{18}$ d) $\frac{2}{38}, \frac{5}{6}$
29. Write the prime factorization of 345.
- a) $3 \cdot 115$ b) $3 \cdot 5 \cdot 23$ c) $15 \cdot 23$ d) $5 \cdot 69$
30. List all of the factors of 288.
31. For the following number, identify which digit is in the tens place: 35,672
- a) 2 b) 7 c) 72 d) 6
32. For the following number, identify which digit is in the hundredths place: 824.6731
- a) 8 b) 7 c) 3 d) 67
33. Convert to a fraction in lowest terms: 0.792
- a) $\frac{198}{250}$ b) $\frac{396}{500}$ c) $\frac{792}{1000}$ d) $\frac{99}{125}$
34. Convert to a decimal: 7.9%
- a) 0.079 b) 7.9 c) 790 d) 0.79
35. Convert to a percent: $\frac{3}{8}$
- a) 0.375 % b) $2.\bar{6}$ % c) 37.5 % d) $266.\bar{6}$ %
36. Convert to a percent: 0.421
- a) 421 % b) 42.1 % c) 0.421 % d) 0.00421 %
37. Mrs. Adam's class has 22 girls and 18 boys. Write a ratio that represents the number of girls in class.
- a) $\frac{11}{9}$ b) $\frac{9}{11}$ c) $\frac{11}{20}$ d) $\frac{20}{11}$
38. Write as a unit rate: 115 miles on 5 gallons of gas
- a) $\frac{115 \text{ miles}}{5 \text{ gallons}}$ b) $\frac{23 \text{ miles}}{1 \text{ gallon}}$ c) 5 miles d) 23 miles
39. Helen earns \$150 per week plus an 8% commission on her total sales. Last week, Helen had \$12,564 in sales. How much did Helen earn last week?
- a) \$1,005.12 b) \$1,155.12 c) \$12,576 d) \$1,006.62
40. Write an equation for the following: 42% of what number is 20?
- a) $42 \cdot x = 20$ b) $20 \cdot 0.42 = x$ c) $0.42 \cdot x = 20$ d) $20 \cdot 42 = x$
41. What is 27.4% of 85?
- a) 310.22 b) 0.0032 c) 2329 d) 23.29

42. Identify the numbers in the following set that are integers: $-19, -\frac{4}{7}, 0, \frac{2}{3}, \sqrt{10}, 1, 4.67$
- a) $-19, -\frac{4}{7}$ b) $-\frac{4}{7}, \frac{2}{3}, \sqrt{10}, 4.67$ c) $-19, 0, 1$ d) $\sqrt{10}$
43. Is the following number prime or composite? 79
- a) prime b) composite c) both d) neither
44. Find the absolute value: $|-5.1|$
- a) 5.1 b) -5.1 c) 0 d) $-(5.1)$
45. Place an inequality symbol between the numbers to make the statement true: $0 _ -4$
- a) \leq b) \geq c) $<$ d) $>$
46. Find the least common denominator (LCD) of $\frac{5}{8}, \frac{1}{6}, \frac{3}{4}$
- a) 2 b) 48 c) 24 d) 8
47. Find the perimeter and area of a rectangle whose length is 15 inches and width is 6 inches.
- a) $P = 21$ in.
 $A = 90$ in. b) $P = 21$ in.
 $A = 90$ in^2 c) $P = 42$ in.
 $A = 90$ in^2 d) $P = 90$ in^2
 $A = 42$ in.
48. Solve: $\sqrt{49}$
- a) 7 b) 7^2 c) -7 d) 49
49. $108 \text{ min} = \underline{\hspace{2cm}} \text{ hr}$
- a) 6480 hr b) 1.8 hr c) 18 hr d) 0.56 hr
50. The ground temperature in Death Valley can get as hot as 194° F . What is this temperature measured in Celsius degrees? Use $C = \frac{5}{9}(F - 32)$.
- a) 75.8° C b) 18° C c) 90° C d) 810° C

Math 20 Final Exam Review - Answers

1. C
2. A
3. B
4. A
5. C
6. D
7. D
8. B
9. B
10. C
11. D
12. A
13. A
14. D
15. A
16. C
17. D
18. B
19. B
20. A
21. C
22. B
23. C
24. 8,167
25. One hundred thirty-five thousand sixty
26. Divisible by 2, 3, and 6
27. D
28. A
29. B
30. 1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 32, 36, 48, 72, 96, 144, 288
31. B
32. B
33. D
34. A
35. C
36. B
37. C
38. B
39. B
40. C
41. D
42. C
43. A
44. A
45. D
46. C
47. C
48. A
49. B
50. C