

ALEKS® Objective 1 Worksheet A

Introduction to Statistics / Math 117 Statistics (Mr. Banimahd)

1. Evaluate the following.

$$3 + 25 \div 5 + 3 \times 7$$

2. Evaluate the following.

$$2 \times 8 - 15 \div 3 + 5$$

3. Evaluate the following.

$$6 \div 2 + 3 \times 4 - 7$$

4. Evaluate the following.

$$6 + 3 \times 9 + 14 \div 2$$

5. Evaluate the following expression.

$$36 \div [(19 - 11) \times 5 - 31]$$

6. Evaluate the following expression.

$$[1 + (20 + 22) \div 6] \times 3$$

7. Evaluate the following expression.

$$40 \div [(14 - 5) \times 2 - 10]$$

8. Evaluate the following expression.

$$[14 + (20 - 14) \times 3] \div 8$$

9. Find the digits in the ones place, in the hundredths place, and in the thousandths place for the following number.

456.9304

ones:

hundredths:

thousandths:

10. Find the digits in the tens place, in the tenths place, and in the ten thousandths place for the following number.

269.5987

tens:

tenths:

ten thousandths:

11. Find the digits in the hundreds place, in the hundredths place, and in the ten thousandths place for the following number.

372.5819

hundreds:

hundredths:

ten thousandths:

12. Find the digits in the ones place, in the tenths place, and in the thousandths place for the following number.

613.6215

ones:

tenths:

thousandths:

13. Round 0.487 to the nearest hundredth.

14. Round 15.864 to the nearest tenth.

15. Round 0.671 to the nearest tenth.

16. Round 31.123 to the nearest tenth.

17.

(a) Write 0.263 as a percentage.

(b) Write 9.3% as a decimal.

18.

(a) Write 0.596 as a percentage.

(b) Write 8.2% as a decimal.

19.

(a) Write 23.4% as a decimal.

(b) Write 0.061 as a percentage.

20.

(a) Write 0.028 as a percentage.

(b) Write 79.3% as a decimal.

21. What is 20% of 69?

22. What is 40% of 56?

23. What is 20% of 76?

24. What is 20% of 74?

25. A chess club with 60 members is electing a new president. Hong received 39 votes. What percentage of the club members voted for Hong?

26. Ivanna has completed 63 deliveries so far this week. She needs to make 90 deliveries for the week. What percentage of her deliveries has Ivanna completed?

27. Ivanna spent a total of \$95 at the grocery store. Of this amount, she spent \$38 on fruit. What percentage of the total did she spend on fruit?

28. In the past year, Milan watched 18 movies that he thought were very good. He watched 40 movies over the whole year. Of the movies he watched, what percentage did he think were very good?

29. Write 14% as a fraction in simplest form.

30. Write 65% as a fraction in simplest form.

31. Write 22% as a fraction in simplest form.

32. Write 34% as a fraction in simplest form.

33. Write $\frac{17}{25}$ as a percentage.

34. Write $\frac{45}{50}$ as a percentage.

35. Write $\frac{13}{20}$ as a percentage.

36. Write $\frac{20}{25}$ as a percentage.

37. The following is a list of 13 measurements:

40, -62, 71, 77, 84, 4, 27, -11, -30, -30, -99, -19, 95.

Suppose that these 13 measurements are respectively labeled x_1, x_2, \dots, x_{13} . (Thus, 40 is labeled x_1 , -62 is labeled x_2 , and so on.)

Find $\sum_{i=1}^{13} (x_i + 44)$.

38. The following is a list of 14 measurements:

-54, -84, 15, -92, 31, -43, 25, -13, -3, -33, 41, -78, -29, 58.

Suppose that these 14 measurements are respectively labeled x_1, x_2, \dots, x_{14} . (Thus, -54 is labeled x_1 , -84 is labeled x_2 , and so on.)

$$\text{Find } \sum_{i=1}^{14} \frac{x_i}{14}.$$

Round your answer to at least two decimal places.

39. The following is a list of 12 measurements:

43, -56, 12, -29, -66, -12, -25, -72, -50, 28, -12, -81.

Suppose that these 12 measurements are respectively labeled x_1, x_2, \dots, x_{12} . (Thus, 43 is labeled x_1 , -56 is labeled x_2 , and so on.)

$$\text{Find } \sum_{i=1}^{12} -36x_i.$$

40. The following is a list of 10 measurements:

27, 53, 13, -80, 7, 81, 1, -20, -14, 10.

Suppose that these 10 measurements are respectively labeled x_1, x_2, \dots, x_{10} . (Thus, 27 is labeled x_1 , 53 is labeled x_2 , and so on.)

$$\text{Find } \sum_{i=1}^{10} (x_i - 43).$$

41. Solve for y .

$$3y - 8 = -20$$

Simplify your answer as much as possible.

42. Solve for x .

$$5 + 4x = -23$$

Simplify your answer as much as possible.

43. Solve for u .

$$-16 = -6 + 2u$$

Simplify your answer as much as possible.

44. Solve for v .

$$-34 = 5v - 4$$

Simplify your answer as much as possible.

45. Solve for y .

$$5(y + 5) - 8y = 31$$

Simplify your answer as much as possible.

46. Solve for x .

$$-12 = -8x + 6(x - 4)$$

Simplify your answer as much as possible.

47. Solve for v .

$$-7 = 3(v + 3) - 5v$$

Simplify your answer as much as possible.

48. Solve for w .

$$-9 = -7w + 3(w - 7)$$

Simplify your answer as much as possible.

49. Solve for u .

$$-5u - 18 = -2(u - 6)$$

Simplify your answer as much as possible.

50. Solve for x .

$$-3(x + 7) = -9x + 9$$

Simplify your answer as much as possible.

51. Solve for v .

$$-9v - 27 = 3(v + 3)$$

Simplify your answer as much as possible.

52. Solve for w .

$$9(w + 8) = -5w + 16$$

Simplify your answer as much as possible.

53. Find the y -intercept of the line whose equation is

$$y = -0.6x - 3.9.$$

54. Find the y -intercept of the line whose equation is

$$y = 1.5x + 5.5.$$

55. Find the y -intercept of the line whose equation is

$$y = -1.6x - 0.6.$$

56. Find the y -intercept of the line whose equation is

$$y = 0.3x + 7.2.$$

57. Find both the x -intercept and the y -intercept of the line given by the equation

$$0.6x + 4.9y + 4.1 = 0.$$

Round your answers to 2 decimal places.

58. Find both the x -intercept and the y -intercept of the line given by the equation

$$3.5x - 6.5y + 9.8 = 0.$$

Round your answers to 2 decimal places.

59. Find both the x -intercept and the y -intercept of the line given by the equation

$$1.7x + 3.5y - 4.6 = 0.$$

Round your answers to 2 decimal places.

60. Find both the x -intercept and the y -intercept of the line given by the equation

$$8.2x - 9.8y - 4.3 = 0.$$

Round your answers to 2 decimal places.

Homework 1 #1 Answers for class Introduction to Statistics / Math 117 Statistics

1. 29

2. 16

3. 8

4. 40

5. $36 \div [(19 - 11) \times 5 - 31] = 4$

6. $[1 + (20 + 22) \div 6] \times 3 = 24$

7. $40 \div [(14 - 5) \times 2 - 10] = 5$

8. $[14 + (20 - 14) \times 3] \div 8 = 4$

9. ones: 6
hundredths: 3
thousandths: 0

10. tens: 6
tenths: 5
ten thousandths: 7

11. hundreds: 3
hundredths: 8
ten thousandths: 9

12. ones: 3
tenths: 6
thousandths: 1

13. 0.49

14. 15.9

15. 0.7

16. 31.1

17. (a) 26.3 %

(b) 0.093

18. (a) 59.6 %

(b) 0.082

19. (a) 0.234

(b) 6.1 %

20. (a) 2.8 %

(b) 0.793

21. 13.8

22. 22.4

23. 15.2

24. 14.8

25. 65%

26. 70%

27. 40%

28. 45%

29. $\frac{7}{50}$

30. $\frac{13}{20}$

31. $\frac{11}{50}$

32. $\frac{17}{50}$

33. 68%

34. 90%

35. 65%

36. 80%

37. 719

38. -18.50

39. 11,520

40. -352

41. $y = -4$

42. $x = -7$

43. $u = -5$

44. $v = -6$

45. $y = -2$

46. $x = -6$

47. $v = 8$

48. $w = -3$

49. $u = -10$

50. $x = 5$

51. $v = -3$

52. $w = -4$

53. y-intercept: -3.9

54. y-intercept: 5.5

55. y-intercept: -0.6

56. y-intercept: 7.2

57. x-intercept: -6.83

y-intercept: -0.84

58. x-intercept: -2.80

y-intercept: 1.51

59. x-intercept: 2.71

y-intercept: 1.31

60. x-intercept: 0.52

y-intercept: -0.44