

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

Evaluate each expression.

1)  $-\frac{9}{8} - -\frac{1}{4}$

A)  $-\frac{7}{8}$

B)  $-\frac{65}{24}$

C)  $\frac{9}{8}$

D)  $\frac{5}{8}$

2)  $-\frac{4}{3} + \frac{5}{4}$

A)  $\frac{29}{84}$

B)  $-\frac{1}{12}$

C)  $-\frac{35}{24}$

D)  $-\frac{13}{12}$

3)  $-8 - \frac{7}{4}$

A)  $-\frac{35}{4}$

B)  $-\frac{71}{8}$

C)  $-\frac{27}{4}$

D)  $-\frac{39}{4}$

4)  $-2 - \frac{1}{2}$

A)  $-\frac{13}{6}$

B)  $-\frac{5}{2}$

C)  $-3$

D)  $-\frac{9}{2}$

5)  $2 + -\frac{1}{4}$

A)  $\frac{17}{12}$

B)  $\frac{15}{4}$

C)  $\frac{13}{4}$

D)  $\frac{7}{4}$

6)  $\frac{1}{4} + -\frac{1}{4}$

A)  $\frac{8}{5}$

B)  $0$

C)  $\frac{7}{5}$

D)  $-4$

7)  $-\frac{3}{2} - \frac{1}{2}$

A)  $-\frac{21}{8}$

B)  $-2$

C)  $-\frac{4}{5}$

D)  $-\frac{12}{5}$

8)  $-\frac{5}{7} - \frac{7}{6}$

A)  $-\frac{101}{210}$

B)  $-\frac{505}{168}$

C)  $\frac{5}{42}$

D)  $-\frac{79}{42}$

9)  $\frac{9}{8} + \frac{4}{3}$

A)  $\frac{293}{168}$

B)  $\frac{605}{168}$

C)  $\frac{25}{8}$

D)  $\frac{59}{24}$

10)  $\frac{1}{6} + -\frac{4}{3}$

A)  $\frac{1}{3}$

B)  $-\frac{7}{6}$

C)  $-\frac{35}{12}$

D)  $\frac{19}{30}$

**Simplify each expression.**

11)  $10b + 4(4 - 6b)$

- A)  $11b - 36$       B)  $11b - 32$   
C)  $-14b + 16$       D)  $-20b + 14$

12)  $-2(v - 3) - 8v$

- A)  $73 - 16v$       B)  $-10v + 5$   
C)  $-10v + 6$       D)  $12 + 54v$

13)  $-7 + 9(5 + 6x)$

- A)  $38 + 54x$       B)  $45 + 54x$   
C)  $74x + 12$       D)  $74x + 7$

14)  $10(5 + 10x) - 6x$

- A)  $48 + 99x$       B)  $48 + 94x$   
C)  $50 + 94x$       D)  $48 + 97x$

15)  $8(-7n - 9) + 8$

- A)  $32n + 15$       B)  $33n - 12$   
C)  $29n - 12$       D)  $-56n - 64$

16)  $-m - 6(3m - 8)$

- A)  $21m + 45$       B)  $-19m + 48$   
C)  $21m + 40$       D)  $-m - 20$

17)  $-8(-8 + 7n) + 2n$

- A)  $-84n + 48$       B)  $64 - 54n$   
C)  $-84n + 40$       D)  $55 - 54n$

18)  $8 + 6(8p + 3)$

- A)  $24 + 48p$       B)  $26 + 48p$   
C)  $-45p + 79$       D)  $-43p + 24$

19)  $-10(7b - 9) + 10b$

- A)  $-60b + 82$       B)  $6b - 21$   
C)  $-60b + 90$       D)  $6b - 12$

20)  $3(3 + 6r) - 8$

- A)  $18 + 64r$       B)  $1 + 18r$   
C)  $-35 + 38r$       D)  $-43 + 38r$

**Find each quotient.**

21)  $\frac{-4}{3} \div \frac{1}{2}$

- A)  $\frac{1}{2}$       B)  $-\frac{8}{3}$   
C)  $\frac{7}{5}$       D)  $-\frac{11}{6}$

22)  $9 \div \frac{6}{5}$

- A)  $\frac{5}{6}$       B)  $-\frac{1}{3}$   
C)  $\frac{15}{2}$       D)  $-\frac{15}{2}$

23)  $\frac{-1}{2} \div \frac{1}{3}$

- A)  $-\frac{5}{6}$       B)  $\frac{3}{2}$   
C)  $-\frac{3}{2}$       D)  $-\frac{4}{5}$

24)  $\frac{-9}{10} \div \frac{2}{3}$

- A)  $-\frac{7}{30}$       B)  $\frac{7}{10}$   
C)  $\frac{27}{20}$       D)  $-\frac{27}{20}$

25)  $\frac{4}{3} \div \frac{1}{6}$

A)  $\frac{7}{6}$       B)  $\frac{2}{9}$

C)  $-\frac{1}{3}$       D) 8

26)  $\frac{3}{2} \div \frac{7}{6}$

A) -5      B)  $\frac{7}{9}$

C)  $\frac{9}{7}$       D)  $-\frac{7}{9}$

27)  $\frac{-4}{5} \div \frac{-9}{8}$

A)  $\frac{9}{10}$       B) -7

C)  $-\frac{77}{40}$       D)  $\frac{32}{45}$

28)  $\frac{3}{8} \div \frac{1}{3}$

A)  $\frac{1}{8}$       B)  $\frac{9}{8}$

C) -2      D) 1

29)  $2 \div \frac{1}{10}$

A) -5      B) 20

C)  $-\frac{1}{20}$       D) 1

30)  $\frac{-3}{10} \div \frac{4}{3}$

A)  $\frac{31}{30}$       B)  $-\frac{9}{40}$

C) 2      D)  $\frac{9}{40}$

31) Mary won 60 lollipops playing the bean bag toss at her school's game night. Later, she gave one to each of her friends. She only has 45 remaining. How many did she give away?

A) 15      B) 17  
C) 30      D) 75

32) Abhasra paid \$3.42 for a salad. She now has \$16.64. With how much money did she start?

A) \$20.06      B) \$13.22  
C) \$19.06      D) \$23.48

33) Beth and her best friend found some money in an envelope. They split the money evenly, each getting \$13. How much money did they find?

A) \$26      B) \$6.50  
C) \$32      D) \$29

34) A recipe for a cake calls for  $4\frac{2}{7}$  cups of sugar. Darryl accidentally put in  $4\frac{3}{8}$  cups.

How many extra cups did he put in?

A)  $8\frac{37}{56}$       B)  $\frac{5}{56}$

C)  $\frac{48}{49}$       D)  $4\frac{3}{8}$

35) Alberto wants to buy a comic book that costs \$2. How much change does he receive if he gives the cashier \$10?

- A) \$12      B) \$9  
C) \$4        D) \$8

37) Shayna and five of her friends went out to eat. They decided to split the bill evenly. Each person paid \$8. What was the total bill?

- A) \$40        B) \$48  
C) \$1.60      D) \$43

39) Your aunt gave you \$10 with which to buy a present. This covered  $\frac{5}{8}$  of the cost. How much did the present cost?

- A) \$15        B) \$13  
C) \$16        D) \$14

36) Norachai wants to buy a tie for \$35.95. He gives the cashier \$40. What is his change?

- A) \$4.62      B) \$4.05  
C) \$75.95    D) \$71.90

38) Scott wants to buy shorts for \$37. He gives the cashier \$40. What is his change?

- A) \$74        B) \$3  
C) \$77        D) \$2

40) Eduardo and his best friend found some money under the couch. They split the money evenly, each getting \$25. How much money did they find?

- A) \$60        B) \$53  
C) \$50        D) \$12.50

**Solve each equation.**

41)  $-14 = \frac{P}{20}$

- A)  $\{-280\}$       B)  $\{-34\}$   
C)  $\left\{-\frac{7}{10}\right\}$       D)  $\{6\}$

42)  $-10 = \frac{a}{20}$

- A)  $\left\{-\frac{1}{2}\right\}$       B)  $\{10\}$   
C)  $\{-200\}$      D)  $\{-30\}$

43)  $17 = b - 3$

- A)  $\left\{5\frac{2}{3}\right\}$       B)  $\{51\}$   
C)  $\{14\}$         D)  $\{20\}$

44)  $-76 = -19x$

- A)  $\{4\}$         B)  $\{1444\}$   
C)  $\{-57\}$       D)  $\{-95\}$

45)  $2m = -14$

- A)  $\{-16\}$       B)  $\{-7\}$   
C)  $\{-12\}$       D)  $\{-28\}$

46)  $\frac{p}{4} = \frac{17}{4}$

- A)  $\left\{\frac{1}{4}\right\}$         B)  $\{17\}$   
C)  $\left\{1\frac{1}{16}\right\}$       D)  $\left\{8\frac{1}{4}\right\}$

$$47) \frac{18}{5} = \frac{v}{5}$$

- A)  $\left\{\frac{18}{25}\right\}$       B)  $\left\{8\frac{3}{5}\right\}$   
 C)  $\{18\}$       D)  $\left\{-1\frac{2}{5}\right\}$

$$48) -90 = 9v$$

- A)  $\{-99\}$       B)  $\{-810\}$   
 C)  $\{-10\}$       D)  $\{-81\}$

$$49) r - 19 = -8$$

- A)  $\{11\}$       B)  $\{-27\}$   
 C)  $\left\{-\frac{8}{19}\right\}$       D)  $\{-152\}$

$$50) n - 20 = -22$$

- A)  $\left\{-1\frac{1}{10}\right\}$       B)  $\{-42\}$   
 C)  $\{-440\}$       D)  $\{-2\}$

51) Jessica had some candy to give to her three children. She first took one piece for herself and then evenly divided the rest among her children. Each child received five pieces. With how many pieces did she start?

- A) 20      B) 8      C) 16      D) 18

52) Jacob won 115 super bouncy balls playing hoops at the county fair. At school he gave four to every student in his math class. He only has 3 remaining. How many students are in his class?

- A) 29      B) 28  
 C) 12      D) 31

53) Amy sold half of her comic books and then bought eighteen more. She now has 43. With how many did she begin?

- A) 86      B) 104  
 C) 50      D) 68

54) James was going to sell all of his stamp collection to buy a video game. After selling half of them he changed his mind. He then bought four more. How many did he start with if he now has 19?

- A) 38      B) 42  
 C) 30      D) 34

55) A wise man once said, "200 reduced by twice my age is 82." What is his age?

- A) 59      B) 65  
 C) 69      D) 36

56) How old am I if 500 reduced by 2 times my age is 324?

- A) 148      B) 93  
 C) 85      D) 88

57) Norachai spent half of his weekly allowance buying pizza. To earn more money his parents let him wash the car for \$5. What is his weekly allowance if he ended with \$11?

- A) \$11      B) \$12  
 C) \$3      D) \$17

58) Lea had some candy to give to her five children. She first took one piece for herself and then evenly divided the rest among her children. Each child received five pieces. With how many pieces did she start?

- A) 10      B) 26  
 C) 32      D) 29

59) You had \$24 to spend on three avocados. After buying them you had \$15. How much did each avocado cost?

- A) \$4      B) \$8  
C) \$3      D) \$5

60) You had \$20 to spend on two notebooks. After buying them you had \$16. How much did each notebook cost?

- A) \$1      B) \$8  
C) \$10      D) \$2

**Solve each equation.**

61)  $1 + \frac{m}{4} = 0$

- A) {16}      B) {-4}  
C) {13}      D) {10}

62)  $\frac{v}{4} + 4 = 8$

- A) {16}      B) {14}  
C) {-14}      D) {11}

63)  $\frac{v}{4} + 6 = 5$

- A) {15}      B) {-16}  
C) {-4}      D) {13}

64)  $\frac{-10 + n}{6} = -3$

- A) {-20}      B) {4}  
C) {-8}      D) {-17}

65)  $-3 = \frac{n - 6}{7}$

- A) {1}      B) {-15}  
C) {9}      D) {-14}

66)  $\frac{p}{3} - 5 = -8$

- A) {2}      B) {3}  
C) {-9}      D) {19}

67)  $\frac{v}{9} + 9 = 10$

- A) {-1}      B) {-11}  
C) {9}      D) {20}

68)  $-2 = \frac{-2 + n}{3}$

- A) {12}      B) {-6}  
C) {-16}      D) {-4}

69)  $\frac{x}{2} + 1 = -3$

- A) {19}      B) {6}  
C) {10}      D) {-8}

70)  $8 + \frac{r}{3} = 14$

- A) {-6}      B) {-9}  
C) {-5}      D) {18}

**Find the slope of the line through each pair of points.**

71)  $(-10, -4), (-11, 19)$

- A)  $\frac{1}{23}$       B) -23  
C) 23      D)  $-\frac{1}{23}$

72)  $(16, -11), (0, 3)$

- A)  $\frac{7}{8}$       B)  $-\frac{7}{8}$   
C)  $\frac{8}{7}$       D)  $-\frac{8}{7}$

73)  $(10, 11), (19, 19)$

A)  $\frac{9}{8}$       B)  $\frac{8}{9}$

C)  $-\frac{8}{9}$       D)  $-\frac{9}{8}$

74)  $(4, 3), (7, -7)$

A)  $-\frac{10}{3}$       B)  $\frac{3}{10}$

C)  $\frac{10}{3}$       D)  $-\frac{3}{10}$

75)  $(8, 16), (1, 6)$

A)  $-\frac{7}{10}$       B)  $\frac{10}{7}$

C)  $-\frac{10}{7}$       D)  $\frac{7}{10}$

76)  $(-1, 10), (17, -12)$

A)  $\frac{9}{11}$       B)  $-\frac{9}{11}$

C)  $-\frac{11}{9}$       D)  $\frac{11}{9}$

77)  $(17, -9), (1, -11)$

A) 8      B)  $-\frac{1}{8}$

C) -8      D)  $\frac{1}{8}$

78)  $(14, 4), (5, -4)$

A)  $\frac{8}{9}$       B)  $-\frac{9}{8}$

C)  $\frac{9}{8}$       D)  $-\frac{8}{9}$

79)  $(13, -18), (-11, -13)$

A)  $\frac{5}{24}$       B)  $-\frac{24}{5}$

C)  $-\frac{5}{24}$       D)  $\frac{24}{5}$

80)  $(14, 0), (12, 17)$

A)  $-\frac{2}{17}$       B)  $-\frac{17}{2}$

C)  $\frac{17}{2}$       D)  $\frac{2}{17}$

**Simplify. Your answer should contain only positive exponents.**

81)  $\frac{6x^2}{2x^3 \cdot x^2}$

82)  $\frac{2x^2 \cdot 8x^3}{6x^2 \cdot 8x}$

83)  $\frac{6x^4}{4x^3 \cdot 3x^4}$

84)  $\frac{3k^3 \cdot 2k^3}{7k}$

85)  $\frac{k^4 \cdot 8k^3}{3k^3 \cdot 5k^4}$

86)  $\frac{5x^4 \cdot 7x^2}{3x^3}$

87)  $\frac{3x^3}{6x^4 \cdot 5x}$

88)  $\frac{3x \cdot 5x^3}{x}$

89)  $\frac{6n^3}{5n^3 \cdot 2n^4}$

90)  $\frac{2p^4 \cdot 2p^3}{8p^3}$

**Find the selling price of each item.**

91) Original price of pants: \$71.50

Discount: 30%

- A) \$67.92      B) \$50.05  
C) \$92.95      D) \$21.45

92) Original price of a puppy: \$279.99

Discount: 60%

- A) \$112.00      B) \$167.99  
C) \$307.99      D) \$447.98

93) Original price of socks: \$20.50

Discount: 35%

- A) \$19.47      B) \$7.17  
C) \$18.45      D) \$13.33

94) Original price of an SUV: \$19,500.00

Discount: 50%

- A) \$15,600.00      B) \$29,250.00  
C) \$16,575.00      D) \$9,750.00

95) Original price of a kitten: \$159.50

Discount: 40%

- A) \$95.70      B) \$175.45  
C) \$223.30      D) \$135.57

96) Original price of a tie: \$5.50

Discount: 35%

Tax: 6%

- A) \$0.33      B) \$7.43  
C) \$7.87      D) \$3.79

97) Original price of a microscope: \$60.00

Discount: 10%

Tax: 6%

- A) \$3.96      B) \$57.24  
C) \$6.00      D) \$54.00

98) Original price of a microscope: \$199.50

Discount: 50%

Tax: 4%

- A) \$311.22      B) \$103.74  
C) \$99.75      D) \$7.98

99) Original price of a book: \$32.50

Discount: 43%

Tax: 4%

- A) \$14.53      B) \$13.42  
C) \$0.74      D) \$19.27

100) Original price of a bicycle: \$2,000.00

Discount: 10%

Tax: 2%

- A) \$2,156.00      B) \$1,960.00  
C) \$2,200.00      D) \$1,836.00