

Review for the final test

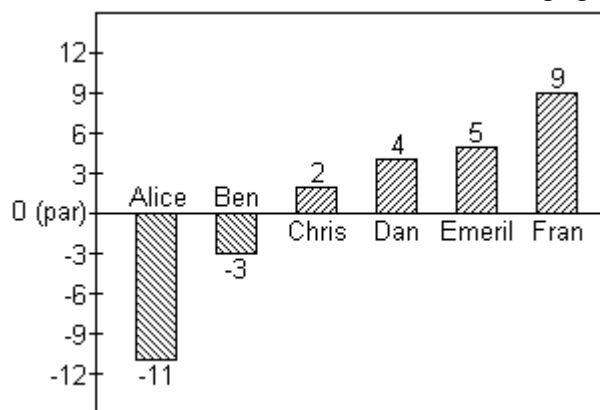
1) Simplify: $9^2 \div 9 \times 3 + 9$

2) Simplify: $8 + 16 \div 4 \cdot 5 - 3$

3) Simplify: $99 \div [3^2 + (72 - 6) - 4^3] + 2 \cdot 10$

4) Simplify: $[3 \div (8 - 5) + 8^2] - [5 - (-1)]^2$

Scores in golf can be 0 (also called par), a positive integer (also called above par) or a negative integer (also called below par). Below are the scores of some members of a college golf team in a recent tournament.



5) Find the average of the scores of the members shown.

6) Simplify: $200 \div 10 - (2 + 3)$

7) Multiply: $-2 \cdot (-7) \cdot (-6)$

8) Simplify: $-3 + 15 - (-14)$

9) Subtract: $-11 - (-18)$

10) Simplify: $-18 + 11 - 7 - (-9)$

11) Simplify: $|-39| + (-7)$

12) Evaluate $-7x^2 + 8x + 4$ for $x = 3$

13) Evaluate $2x - y$ for $x = 10, y = -20$

14) Solve: $26 = -28 + n$

15) Solve: $104 = -8z$

16) Add: $-2 + 25 + (-22)$

17) Simplify: $\frac{6(-3) - 5 + 7}{-64 \div 4}$

18) Simplify: $\frac{16(-1) - (-6)(-7)}{2[-16 \div (-4 - 4)]}$

19) Divide: $-84 \div (-6)$

20) Simplify: $9x - (7 - 4x)$

21) Solve: $-12x = -144$

22) Solve: $7x = 6x - 4$

23) Solve: $-7 + 7x = -42$

24) Solve: $9x - 15 = 4x - 10$

25) Solve: $3x + 16 + 4x = -20 - x - 28$

26) Solve: $\frac{x}{6} - 7 = -11$

27) Solve: $-8(x - 4) - 5 = -5 - 9x$

28) Multiply: $\left(-\frac{7}{8}\right)\left(-\frac{5}{9}\right)$

Add and, if possible, simplify.

29) $\frac{1}{6} + \frac{1}{12} + \frac{6}{15}$

30) $-\frac{5}{8} + \left(-\frac{4}{5}\right)$

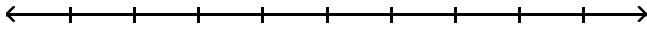
Arrange the three fractions from smallest to largest.

31) $\frac{7}{8}, \frac{3}{12}, \frac{7}{6}$

32) Divide, write the answer in simplest form.. $\frac{4}{9} \div \left[-\frac{13}{16y}\right]$

Graph the list of numbers on the given number line.

33) $-3, -2\frac{1}{2}, -\frac{1}{6}, \frac{9}{10}, 3$



Solve.

34) Solve: $\frac{8}{27}x = -\frac{16}{63}$

35) Solve: $q + \frac{1}{4} = -\frac{3}{20}$

36) Solve: $\frac{x}{4} - 8 = \frac{x}{5} - 6$

37) Solve: $\frac{1}{4}n = 14$

38) Add or subtract, write the answer in simplest form. $\frac{7x}{8} + \frac{4x}{5} - \frac{3}{16}$

39) Convert $-14\frac{13}{21}$ to fractional notation.

40) Add or subtract, write the answer in simplest form. $17 - 8\frac{1}{3}$

41) Add or subtract, If the answer is an improper fraction, write it as a mixed number in simplest form.

$$18\frac{2}{9} - \frac{15}{27}$$

42) Add or subtract, If the answer is an improper fraction, write it as a mixed number in simplest form.

$$-24\frac{1}{10} + 4\frac{2}{25}$$

43) Add or subtract, If the answer is an improper fraction, write it as a mixed number in simplest form.

$$-20\frac{7}{8} - \left(-49\frac{5}{6}\right)$$

44) Add or subtract, If the answer is an improper fraction, write it as a mixed number in simplest form.

$$29\frac{2}{9} + 12\frac{7}{27}$$

45) Divide, If the answer is an improper fraction, write it as a mixed number in simplest form.

$$-3\frac{1}{45} \div \left(-1\frac{4}{9}\right)$$

46) Simplify: $\left(\frac{-1}{20} - \frac{7}{5}\right) \div \frac{2}{13}$

Simplify the complex fraction.

47) $\frac{\frac{4}{3} - \frac{6}{7}}{\frac{3}{4} - \frac{5}{6}}$

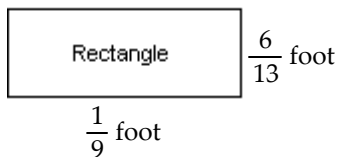
Solve. Give your answer as a mixed numeral.

48) Annie must send two packages. One of the packages weighs $11\frac{1}{5}$ lb and the other weighs $17\frac{5}{9}$ lb. What is the total weight of the two packages?

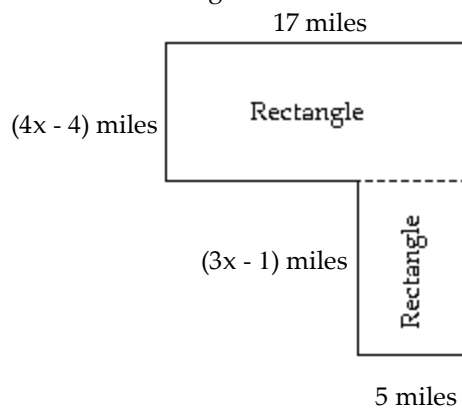
Solve the proportion for the given variable.

49) $\frac{0.9}{5} = \frac{1.8}{n}$

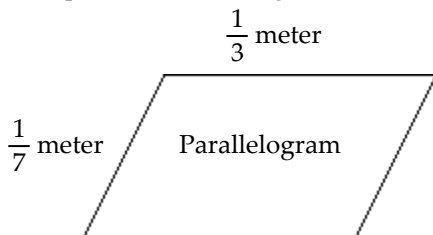
50) Find the perimeter and area of the rectangle.



51) Find the area of the figure.



52) Find the perimeter of the figure.



Perform the indicated operation. Round the result to the nearest thousandth if necessary.

53) $-48.53 - 3.28$

Simplify.

54) $6.3 \times 4.7 + 0.9 \div 7.2$

Simplify the expression.

55) $(-8.7)^2 + 3.6 - 4.4$

Find the unit price and decide which is the better buy.

56) Popcorn:
18 ounces for \$4.64
6 ounces for \$1.50

Find fractional notation for the ratio. You need not simplify.

57) $6\frac{4}{7}$ to $2\frac{5}{9}$

Find the rate as a ratio of distance to time.

58) 80 mi, 2 hr

Simplify.

59) $2.8x - 3.5 - 1.6x - 9.8$

Solve the equation.

60) $1.6x - 3.4 = 0.8x - 3.16$

Solve the problem.

61) An 8-oz bottle of hair spray costs \$4.50. Find the unit price in cents per ounce.

Solve. Give your answer as a mixed numeral if necessary.

62) $\frac{1}{2} = \frac{x}{19}$

Solve.

63) $\frac{n}{11} = \frac{9.9}{2}$

64) $\frac{9}{\frac{1}{8}} = \frac{24}{x}$

Find decimal notation

65) 38.67%

Find fractional notation and simplify.

66) 126%

67) 49% of what number of miles is 75 miles?

68) 375 farms is what percent of 1520 farms?

69) The sales tax rate in one state is 6.25%. How much tax will be charged on a purchase of 6 chairs at \$52 apiece? Round your answer to the nearest cent.

70) A camera costs \$150. If the sales tax rate is 9%, how much tax is charged and what is the total price? Round your answers to the nearest cent.

71) What number is 47% of 20?

Convert as indicated.

72) 17.5 lb to ounces

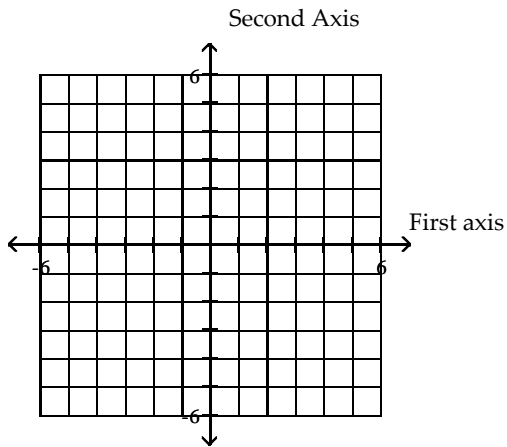
73) 279 oz to _____ lb _____ oz

Perform the indicated operation. Simplify the result if possible.

74) 33 ft 3 in. - 14 ft 10 in.

Plot the points on the graph.

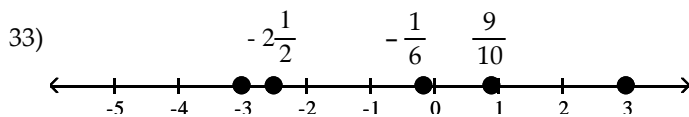
75) A(0, 1), B(-4, -5)



Answer Key

Testname: REVIEW FOR THE FINAL-MATH 112-FALL 15

- 1) 36
- 2) 25
- 3) 29
- 4) 29
- 5) 1
- 6) 15
- 7) -84
- 8) 26
- 9) 7
- 10) -5
- 11) 32
- 12) -35
- 13) 40
- 14) 54
- 15) -13
- 16) 1
- 17) 1
- 18) -14.5
- 19) 14
- 20) $13x - 7$
- 21) 12
- 22) -4
- 23) -5
- 24) 1
- 25) -8
- 26) -24
- 27) -32
- 28) $\frac{35}{72}$
- 29) $\frac{13}{20}$
- 30) $-\frac{57}{40}$
- 31) $\frac{3}{12}, \frac{7}{8}, \frac{7}{6}$
- 32) $-\frac{64y}{117}$



- 34) $-\frac{6}{7}$
- 35) $-\frac{2}{5}$
- 36) 40
- 37) 56
- 38) $\frac{134x - 15}{80}$

Answer Key

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39) $-\frac{307}{21}$

40) $8\frac{2}{3}$

41) $17\frac{2}{3}$

42) $-20\frac{1}{50}$

43) $28\frac{23}{24}$

44) $41\frac{13}{27}$

45) $2\frac{6}{65}$

46) $\frac{-377}{40}$

47) $-\frac{40}{7}$

48) $28\frac{34}{45}$ lb

49) 10

50) perimeter: $1\frac{17}{117}$ ft; area: $\frac{2}{39}$ sq ft

51) $(83x - 73)$ sq mi

52) $\frac{20}{21}$ m

53) -51.81

54) 29.735

55) 74.89

56) 6-oz size

$6\frac{4}{7}$

57) $\frac{2\frac{5}{9}}$

58) $40\frac{\text{mi}}{\text{hr}}$

59) $1.2x - 13.3$

60) 0.3

61) $56.25\frac{\text{cents}}{\text{oz}}$

62) $9\frac{1}{2}$

63) 54.45

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

65) 0.3867

Answer Key

Testname: REVIEW FOR THE FINAL-MATH 112-FALL 15

66) $\frac{63}{50}$

67) 153

68) 24.7%

69) \$19.50

70) \$13.50, \$163.50

71) 9.4

72) 280 oz

73) 17 lb 7 oz

74) 18 ft 5 in.

75)

