

MAT 0002
Final Review
A. Acosta

1. Round 94156 to the nearest thousand.

Select the correct answer:

- a. 94000
- b. 94,100
- c. 95,000
- d. 94,200

2. Round \$67230 to the nearest \$100.

Select the correct answer:

- a. \$68000
- b. \$67000
- c. \$67200
- d. \$67300

3. Subtract:

$$851 - (476 - 61)$$

Select the correct answer:

- a. 314
- b. 1,266
- c. 436
- d. 446

4. From the following list of prime numbers, put a check next to those that are prime.

- a. 18
- b. 75
- c. 1
- d. 3
- e. 47
- f. 2
- g. 87
- h. 4

5. Use exponents to write the following expression in a simpler form.

$$11(11)(7)(7)$$

- a. $2^{11} \cdot 2^7$
- b. $11^2 \cdot 7^2$
- c. 2^{18}

6. Which of the following expressions is written correctly?

- a. $-4 + (-1)$
- b. $-4 + -1$

7. Find the sum of 11, 17, -12 , and 8.

- a. -10
- b. 48
- c. 8
- d. 24

8. Evaluate the following expression:

$$327 + (-375) - 307.$$

- a. 395
- b. -355
- c. 259
- d. 1,009

9. Find the difference:

$$17 - (-1).$$

- a. -16
- b. -18
- c. 18
- d. 16

10. Find the difference:

$$-12 - 12.$$

- a. -24
- b. 24
- c. 0

11. Evaluate the expression:

$$-833 - 1,673 - (-358).$$

- a. 2,148
- b. -2,148
- c. 2,864
- d. -2,864
- e. -482

12. Evaluate the expression: $(-10)(-3)(-2)$

- a. 60
- b. -60
- c. 62
- d. -62

13. Find the quotient: $\frac{-10}{5}$

- a. 2
- b. 5
- c. -2
- d. 10
- e. -5

14. Evaluate: $\frac{-24 - 22}{-10 - 5}$

- a. $3\frac{1}{14}$
- b. $3\frac{15}{16}$
- c. $3\frac{14}{15}$
- d. $3\frac{1}{15}$
- e. $3\frac{1}{16}$

15. Which of the following are improper fractions?

- a. $\frac{3}{11}$
- b. $\frac{11}{11}$
- c. $\frac{3}{3}$
- d. $\frac{11}{3}$

16. To complete the job, Bob will have to work for 8 hours. If Bob works on the job for only 3 hours, what amount of the job will be completed? Select the correct answer.

- a. $\frac{8}{3}$
- b. $\frac{3}{8}$

17. Multiply. Reduce your answer to lowest terms and select the correct answer.

$$\left(-\frac{8}{28}\right) \times \left(-\frac{14}{32}\right)$$

.

- a. $\frac{1}{8}$
- b. $\frac{14}{112}$
- c. $\frac{8}{64}$

18. Find the quotient, and select the correct answer.

$$8 \div \frac{1}{4}$$

.

- a. 2.00
- b. $\frac{8}{32}$
- c. 4
- d. 42
- e. 32

19. Find $8 \div \frac{2}{6}$. Choose your answer below.

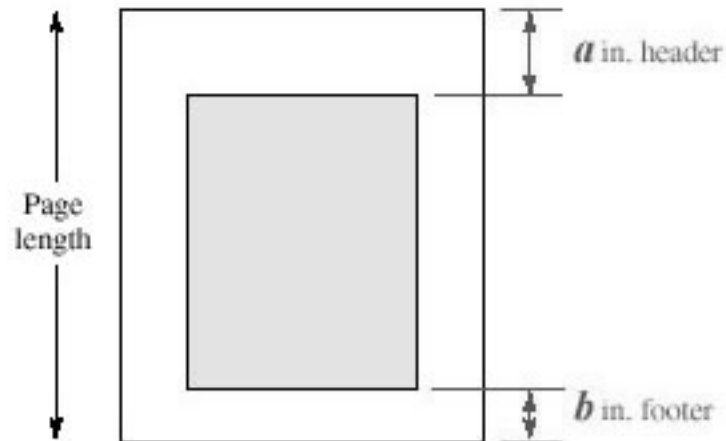
- a. 24
- b. 48
- c. 0.666667
- d. 16
- e. 34

20. Find the quotient and select the correct answer.

$$\frac{7}{11} \div \left(-\frac{2}{7}\right)$$

- a. $\frac{47}{27}$
b. $-\frac{46}{26}$
c. $-\frac{54}{23}$
d. $-\frac{50}{19}$
e. $-\frac{53}{20}$
f. $-\frac{49}{22}$

21. The page design for a magazine cover includes a blank strip at the top called a header, and a blank strip at the bottom called a footer. In the illustration below, how much page length is lost because of the header and footer, if $a = \frac{1}{16}$ and $b = \frac{7}{8}$?



- a. $\frac{1}{2}$
- b. $\frac{1}{16}$
- c. 1
- d. $\frac{14}{16}$
- e. $\frac{15}{16}$

22. Write the following mixed number as an improper fraction.

$$-5\frac{4}{7}$$

Select the correct answer.

- a. $-\frac{9}{7}$
- b. $-\frac{39}{7}$
- c. $\frac{35}{7}$

23. Multiply the fractions below and write your answer as an improper fraction.

$$5\frac{1}{3} \cdot 3\frac{1}{5}$$

Select the correct answer.

- a. $\frac{64}{15}$
- b. $\frac{240}{15}$
- c. $\frac{256}{15}$

24. Multiply and simplify your answer if possible.

$$-12 \cdot 2\frac{1}{3}$$

Select the correct answer.

- a. 20
- b. -28
- c. 28

25. Find the area of the license plate in the illustration below if

$$a = 2\frac{1}{2} \text{ and } b = 2\frac{1}{2}$$



Select the correct answer.

- a. $\frac{9}{4}$
- b. $\frac{25}{4}$
- c. $\frac{16}{4}$

26. Fractions that are greater than 1, such as $\frac{13}{4}$, are called:

- a. proper fraction
- b. improper fraction

27. Find the difference.

$$78\frac{2}{5} - 42\frac{1}{7}$$

Select the correct answer.

- a. $36\frac{7}{35}$
- b. $36\frac{9}{35}$
- c. $36\frac{19}{35}$

28. Find the difference.

$$11\frac{2}{6} - 3\frac{1}{30}$$

Select the correct answer.

- a. $8\frac{9}{30}$
- b. $8\frac{11}{30}$
- c. $8\frac{15}{30}$

29. Find the difference.

$$390\frac{3}{7} - 113\frac{2}{14}$$

Select the correct answer.

- a. $277\frac{4}{7}$
- b. $277\frac{2}{14}$
- c. $277\frac{2}{7}$

30. Find the sum.

$$7\frac{1}{5} + 8\frac{5}{10} + 2\frac{1}{15}$$

Select the correct answer.

- a. $18\frac{23}{30}$
- b. $17\frac{7}{5}$
- c. $17\frac{23}{30}$

MAT 0002
Final Review
A. Acosta

31. Round the following decimal to the nearest whole number:

685.341

Select the correct answer:

- a. 685
- b. 686
- c. 685.5
- d. 685.3

32. Complete the check shown in illustration by writing *One thousand twenty-five* $\frac{37}{100}$ on the amount line.

Ellen Russell 455 Santa Clara Ave. Parker, CO 25413	April 14, 20 00
PAY TO THE ORDER OF <u>Citicorp</u>	\$ _____
_____ DOLLARS	
BA Downtown Branch P.O. Box 2456 Colorado Springs, CO 21712 MEMO <u>Mortgage</u>	<u>Ellen Russell</u>
45-828-02-33-4660	

Select the correct answer:

- a. \$102.537
- b. \$1025.37
- c. \$1025.0037
- d. \$1025.037

33. Subtract: $-29.82 - (-24.117)$

Select the correct answer:

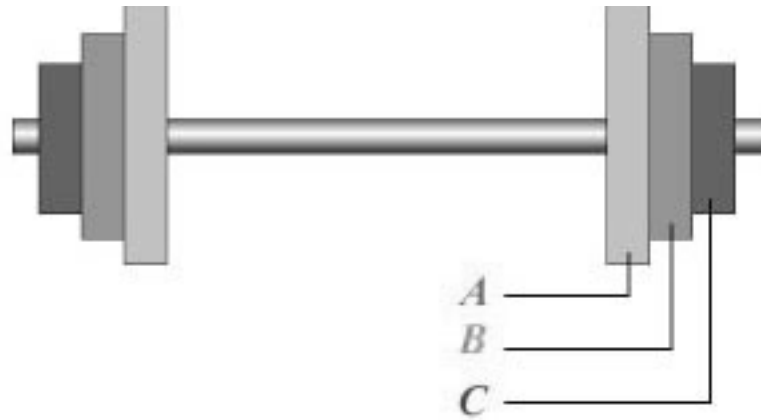
- a. -5.702
- b. -5.814
- c. -5.703
- d. -4.578
- e. -5.603
- f. -5.723

34. Multiply: $-6.5 \cdot 7.5 \cdot (-8.9)$

Select the correct answer:

- a. -433.875
- b. -43.3875
- c. 43.3875
- d. 433.685
- e. 433.875

35. The barbell illustrated below is evenly loaded with weights. If $A = 99.3$ pounds, $B = 92.7$ pounds and $C = 77.3$ pounds, how much weight is loaded on the barbell?



Select the correct answer:

- a. 167.8 pounds
 - b. 538.6 pounds
 - c. 269.3 pounds
36. A bakery buys various types of nuts as ingredients for cookies. What is the cost of 19 pounds of peanuts if the price per pound of peanuts is \$3.95?

Select the correct answer:

- a. \$75.05
- b. \$35.10
- c. \$7.51

37. Divide: $(-13.47) \div (-3)$

Select the correct answer:

- a. 4.39
- b. 4.44
- c. 5.49
- d. 4.99
- e. 4.49

38. Do the following division mentally:

$$-6.107 \div 100$$

Select the correct answer:

- a. 610.7
- b. -0.6107
- c. -0.006107
- d. -0.06107
- e. 61.07
- f. 6,107

39. Write the following fraction in decimal form:

$$-\frac{5}{250}$$

Select the correct answer:

- a. 0.0002
- b. -0.02
- c. -0.0002
- d. -0.5
- e. 0.02
- f. none of these
- g. 1,250

40. Write the following fraction in decimal form. Round to the nearest thousandth:

$$\frac{17}{33}$$

Select the correct answer:

- a. 0.517
- b. 0.515
- c. 0.516
- d. none of these

41. Evaluate the algebraic expression $\frac{5}{9} \pi r^3$ for $\pi = 3.14$ and $r = 18$

Select the correct answer:

- a. 10,173.6
- b. 675,833,519.7
- c. 10,368
- d. 32,962.464
- e. none of these

42. Change the following percent to a fraction. Simplify when necessary. Select the correct answer.

470%.

- a. $\frac{47}{10}$
- b. $\frac{47}{100}$

43. Change the following percent to a fraction. Select the correct answer.

2.3%

- a. $\frac{23}{100}$
- b. $\frac{23}{1000}$

44. Change the following decimal to a percent. Select the correct answer.

6.49

- a. 649%
- b. 64.9%
- c. 0.0649%

45. Change the following fraction to a percent. Select the correct answer.

$$\frac{73}{100}$$

- a. 730%
- b. 7,300%
- c. 73%

46. Change the following fraction to a percent. Select the correct answer.

$$\frac{5}{50}$$

- a. 50%
- b. 10%

47. What number is 30% of 110?

- a. 33
- b. 330
- c. 3.3

48. Write a fraction in simplified form that expresses the ratio of 6 to 16.

- a. $\frac{6}{16}$
- b. $\frac{3}{8}$
- c. $\frac{8}{3}$

49. Write the phrase "4,800,000 people living in 15,000 square miles" as a unit rate. Choose your answer from below.

- a. 320
- b. 960
- c. 640

50. Write the following statement as a proportion: 9 is to 27 as 30 is to 90. Choose your answer from below.

- a. $\frac{9}{90} = \frac{30}{27}$
- b. $\frac{9}{27} = \frac{30}{90}$

ANSWER KEY

MAT 0002

Final Review

A. Acosta

1. a
2. c
3. c
4. d | e | f
5. b
6. a
7. d
8. b
9. c
10. a
11. b
12. b
13. c
14. d
15. b | c | d
16. b
17. a
18. e
19. a
20. f
21. e
22. b
23. c
24. b
25. b
26. b
27. b
28. a
29. c
30. c
31. a
32. b
33. c
34. e
35. b
36. a
37. e
38. d

ANSWER KEY

MAT 0002
Final Review
A. Acosta

- 39. b**
- 40. b**
- 41. a**
- 42. a**
- 43. b**
- 44. a**
- 45. c**
- 46. b**
- 47. a**
- 48. b**
- 49. a**
- 50. b**