PASSAIC COUNTY COMMUNITY COLLEGE
MA 001 FINAL EXAMINATION
FALL 1998

1. Which statement is correct?
   a. 5.25 < 5.241
   b. 5.13 > 5.135
   c. 5.17 > 5.2
   d. 169.1 > 169
   e. none of these

2. Write three hundred five thousand five in standard form.
   a. 305,005
   b. 305,050
   c. 305
   d. 3,005
   e. none of these

3. Round 37,651 to the nearest hundred.
   a. 38,000
   b. 37,600
   c. 37,700
   d. 37,650
   e. none of these

4. Evaluate: 37,123 - 22,989
   a. 14,034
   b. 14,234
   c. 14,134
   d. 14,124
   e. none of these

5. Evaluate: \[ \underline{42} \underline{2352} \]
   a. 56
   b. 58
   c. 57
   d. 59
   e. none of these

6. Evaluate: 23 \times 198
   a. 4554
   b. 4553
   c. 4544
   d. 5454
   e. none of these
7. Find the prime factorization of 420.
   a. \(2 \times 2 \times 3 \times 3 \times 5\)
   b. \(2 \times 2 \times 3 \times 5 \times 7\)
   c. \(2 \times 2 \times 3 \times 3 \times 7\)
   d. \(2 \times 2 \times 3 \times 5 \times 7\)
   e. none of these

8. Round 567.15 to the nearest tenth.
   a. 570.1
   b. 570.0
   c. 567.1
   d. 567.2
   e. none of these

9. Simplify: \(6 \times 3 + 9 \div 3 - 2\)
   a. 3
   b. 27
   c. 23
   d. 19
   e. none of these

10. Which statement is correct?
    a. \(5/7 < 8/11\)
    b. \(5/7 > 8/11\)
    c. \(5/7 = 8/11\)
    d. \(0 > 1\)
    e. none of these

11. Evaluate: \(3 \times 2/5 + 1 \times 3/7\)
    a. \(4 \times 5/12\)
    b. \(4 \times 6/35\)
    c. \(4 \times 29/35\)
    d. \(4 \times 6/12\)
    e. none of these
12. Evaluate: $10 - 2 \frac{8}{11}$
   a. $8 \frac{8}{11}$
   b. $7 \frac{8}{11}$
   c. $7 \frac{3}{11}$
   d. $8 \frac{3}{11}$
   e. none of these

13. Evaluate: $3 \frac{6}{11} \times 2 \frac{7}{13}$
   a. 6
   b. $\frac{1}{6}$
   c. $\frac{1}{9}$
   d. 9
   e. none of these

14. Evaluate: $.013 \times .25$
   a. .00325
   b. .0325
   c. .3250
   d. .000325
   e. none of these

15. Evaluate: $2 \frac{3}{7} \div 17 \frac{1}{21}$
   a. 3
   b. $\frac{1}{3}$
   c. $\frac{3}{7}$
   d. $17 \frac{1}{21}$
   e. none of these

16. Evaluate: $3.01 + .017 + .007$
   a. 3.033
   b. 3.034
   c. 30.34
   d. 30.33
   e. none of these

17. Evaluate: $5.125 - 3.19$
   a. 1.935
   b. 1.930
   c. 1.953
   d. 1.900
   e. none of these
18. Evaluate \[ \frac{.196}{.56} \]
   a. .35
   b. .355
   c. 3.5
   d. 35
   e. none of these

19. Evaluate: \[ 35 \times \frac{5}{7} \]
   a. 35
   b. 175
   c. 25
   d. 5
   e. none of these

   a. $16.71
   b. $16.01
   c. $10.43
   d. $11.43
   e. none of these

21. Write .462 as a percent.
   a. 46.2%
   b. 4.62%
   c. .462%
   d. 462%
   e. none of these

22. Write 3 \( \frac{11}{63} \) as a fraction.
   a. \( \frac{33}{63} \)
   b. \( \frac{100}{63} \)
   c. \( \frac{50}{63} \)
   d. \( \frac{2}{63} \)
   e. none of these

23. Simplify: \( 3^3 \times 2^2 \)
   a. 108
   b. 36
   c. 24
   d. 7776
   e. none of these
24. Which statement is correct?
   a. $8/11 > .727$
   b. $8/11 < .727$
   c. $8/11 = .727$
   d. $0 > 1/2$
   e. none of these

25. 186 is 62% of what?
   a. 3.4
   b. .34
   c. 117.18
   d. 300
   e. none of these

26. What is 43% of 300?
   a. 129
   b. 1.29
   c. .129
   d. 12.9
   e. none of these

27. 46 is what percent of 230?
   a. 27%
   b. 20%
   c. 200%
   d. .20%
   e. none of these

28. Find the unit cost: 10 hockey sticks costs $59.56, round to the nearest penny.
   a. $5.96
   b. $5.95
   c. $5.86
   d. $5.94
   e. none of these

29. Sergei Zulov had 60, 46, 54, 47, 33 assists in 5 years. Find his average per year?
   a. 60
   b. 33
   c. 50
   d. 48
   e. none of these
30. Solve the proportion: \(6/n = 3/5\)
   a. 1/10
   b. 10
   c. 18
   d. 30
   e. none of these

31. Simplify: \(6 \cdot 3 - 14 ÷ 2 + (12 - 4) ÷ 4\)
   a. 13
   b. 4
   c. 1
   d. 5
   e. none of these

32. On a map, 4 inches represents 200 miles. How far does 6 inches represent?
   a. 300
   b. 400
   c. 200
   d. 250
   e. none of these

33. 50 Circuits were tested and 5 were found defective. What percent of the total number were defective?
   a. 10%
   b. 1.0%
   c. 90%
   d. 9.0%
   e. none of these

34. Evaluate: \(-6 + (-8)\)
   a. -14
   b. -2
   c. 14
   d. 2
   e. none of these

35. Evaluate: \(-2 + (-8) + (-10)\)
   a. -20
   b. 20
   c. 4
   d. -4
   e. none of these
36. Evaluate: \(-12 - (-7)\)
   a. -5
   b. 5
   c. 19
   d. -19
   e. none of these

37. Evaluate: \((-1) \times (-2) \times (3) \times (2)\)
   a. 12
   b. -12
   c. 7
   d. -7
   e. none of these

38. Evaluate: \((-25) \div (-5)\)
   a. 5
   b. -5
   c. 1/5
   d. -1/5
   e. none of these

39. Evaluate \(-|4|\)
   a. 4
   b. -4
   c. -3
   d. 3
   e. none of these

40. Which statement is correct
   a. 0 < -3
   b. -5 < -7
   c. -10 < -2
   d. -2 < -3
   e. none of these
PASSAIC COUNTY COMMUNITY COLLEGE  
MA 001  
SPRING 2003

ANSWER ALL QUESTIONS:

1. Simplify: \(3^2 \cdot 2^3 \cdot 1^0\)
   a) 0  b) 54  c) 72  d) 48

2. Subtract: \(13,102 - 8,344\)
   a) 3,312  b) 3,812  c) 4,758  d) 4,368

3. Write 107,030 in words
   a) Ten hundred seven thousand thirty  b) Seventeen thousand thirty
      c) Three hundredth seven thirty     d) One hundred seven thousand thirty

4. Find the product of 208 and 1050
   a) 29,400  b) 218,400  c) 318,580  d) 307,080

5. Simplify: \(15 - 3(7 - 2)\)
   a) 0  b) 30  c) 3  d) 7

6. Find the quotient of 506 and 7
   a) 504 R 2  b) 72 R 4  c) 72  d) 72 R 2

7. Round 276.2367 to the nearest hundredth
   a) 276.23  b) 276.24  c) 280  d) 276.237

8. Subtract 12.07 - 2.088
   a) 8.982  b) 9.982  c) 8.012  d) 7.902

9. Which statement is correct?
   a) 18.01 > 18.101  b) 0 > 18.01  c) 18.101 > 18.01  d) 18.01 < 0
10. Divide: \( \frac{12.65}{5.06} \)

a) 2.5 b) 0.4 c) 11.8 d) 25

11. Find the least common multiple of 18 and 12

a) 72 b) 27 c) 6 d) 36

12. Evaluate: \(-|-8|\)

a) -8 b) 8 c) 0 d) -9

13. Find the prime factorization of 450

a) \(9 \cdot 5 \cdot 10\) b) \(2 \cdot 3^2 \cdot 5^2\) c) \(2^2 \cdot 3^2 \cdot 5^2\) d) \(3^2 \cdot 5 \cdot 10\)

14. Divide: \(-42 \div (-6)\)

a) 7 b) -7 c) -6 d) 6

15. Multiply: \(-2 \frac{1}{2} \times 3 \frac{3}{5}\)

a) \(\frac{63}{10}\) b) \(\frac{61}{5}\) c) \(-\frac{63}{10}\) d) -9

16. Subtract: \(2 \frac{1}{10} - 1 \frac{1}{2}\)

a) \(2 \frac{1}{10}\) b) \(1 \frac{1}{2}\) c) \(-\frac{1}{2}\) d) \(\frac{3}{5}\)

17. Find 17% of 60

a) 1.02 b) -102 c) 10.2 d) 9.22

18. 25% of what number is 74?

a) 296 b) 147 c) 300 d) 410
19. Tony worked 12 hours and earned $138. How much did Tony earn per hour?
   a) $10.25   b) $11.50   c) $11.75   d) $11.00

20. Multiply: \((-5)(3)(-4)\)
   a) 60   b) -12   c) -55   d) -120

21. Subtract: 12 from \(-7\)
   a) 5   b) -5   c) 9   d) -19

22. If Frank travels 261 miles in 4 \(\frac{1}{2}\) hours how fast is he driving?
   a) 68 mi/hr   b) 32 mi/hr   c) 75 mi/hr   d) 58 mi/hr

23. Find the sum: \(4.1 + 5 + 2.07\)
   a) 11.8   b) 7.67   c) 11.17   d) 2.53

24. Convert: 5.097 % to a decimal
   a) 0.05097   b) 509.7   c) 50.1   d) 50.97

25. Find the sum: \((-3) + 8 + (-11)\)
   a) -16   b) -6   c) 0   d) -22

26. Write 2.1 as a percent
   a) 2.1%   b) 21%   c) 0.21%   d) 210%

27. Find 5% of 37
   a) 18.5   b) 0.185   c) 1.85   d) 185

28. Shoes originally selling for $120 are on sale for $60. What is the percent of discount?
   a) 20%   b) 120%   c) 50%   d) 80%

29. Reduce to simplest form: \(\frac{126}{210}\)
   a) 3/5   b) 3/2   c) 2/2   d) 9/5

30. Write as a unit rate: 144 miles on 6 hours
   a) 24 mi/h   b) 36 mi/h   c) 12 mi/h   d) 6 mi/h
31. Solve for x: \( \frac{x}{7} = \frac{6}{14} \)
   a) 3         b) 14         c) 28         d) 2

32. Divide \( 3.1 \div 0.64 \) round to the nearest tenth
   a) 0.2       b) 48.4       c) 5.8       d) 4.8

33. Convert \( \frac{5}{8} \) to a decimal
   a) 0.625     b) 1.6        c) 6.25      d) 0.63

34. Write as a decimal: Eighteen and seven thousandths
   a) 18.007    b) 1807       c) 18.70     d) 18.0007

35. Round 563.862 to the nearest ten
   a) 563.9     b) 563.86     c) 560       d) 570

36. Find the difference between 9 and \(-7\).
   a) -16       b) -2         c) 2        d) 16

37. Multiply: \( 1,563 \times 27 \)
   a) 42,201    b) 32,120     c) 4,201     d) 41,101

38. Multiply: \( 8.62 \times 3.9 \)
   a) 336.18    b) 23.618     c) 33.618    d) 12.52

39. A TV originally selling for $382 is on sale at 20% off. How much would you pay for the TV on sale?
   a) $30.56    b) $305.60     c) $76.40    d) $300.56

40. 35% of all items from a batch of 140 items did not pass a quality control test, how many items passed?
   a) 115       b) 49         c) 91        d) 105
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