

Math 090
Final Exam Review
Fall 2006

- 1) Add: $1124 + 3159 + 717$
 a) 4990 b) 5000 c) 5090 d) 4900
- 2) The seating capacity of an arena is 20,000 seats. Last week 7831 tickets were sold to an ice show in the arena and 7378 tickets were sold this week. How many tickets were sold to the ice show during the two-week period?
 a) 12,169 b) 14,709 c) 14,209 d) 15,209
- 3) Subtract:
$$\begin{array}{r} 6,544,870 \\ - 1,644,509 \\ \hline \end{array}$$

 a) 8,189,379 b) 4,256,361 c) 4,900,361 d) 4,905,451
- 4) Below is a table of major waterfalls in the world. Kile Waterfall is how many feet shorter than Angel Waterfall?

Height of Major Waterfalls

Waterfall	Feet	Meters
Angel	3212	979
Yosemite	2526	770
Kile	1840	561
Takakkaw	1200	366
Multnomah	620	216

- a) 481 b) 5052 c) 1540 d) 1372
- 5) Multiply: 75×18
 a) 1250 b) 2820 c) 1350 d) 1150
- 6) Maria makes loan payments of \$220 each month for 24 months. What is the total amount of money paid?
 a) \$5280 b) \$5180 c) \$52,800 d) \$528
- 7) Divide: $26 \overline{)888}$
 a) $34 r4$ b) $34 r10$ c) $34 r5$ d) $34 r25$
- 8) Victor's annual salary of \$14,760 is paid in 12 equal monthly payments. How much does Victor receive each month?
 a) \$10,500 b) \$1330 c) \$1230 d) \$123
- 9) Simplify: $49 \div 7 \times 7 + 8 - 2$
 a) 103 b) 55 c) 7 d) 68
- 10) A jumbo jet carries 290 passengers, 36 in first class, and the remainder in coach. If the average first class ticket is \$560 and the average coach ticket is \$344, how much income is there from ticket sales if the plane is full?
 a) \$131,080 b) \$110,076 c) \$107,536 d) \$154,624
- 11) Write the prime factorization of 84.
 a) $2^2 \times 3 \times 5$ b) $2 \times 3^2 \times 7$ c) $2^2 \times 3 \times 7$ d) $2 \times 3 \times 7$

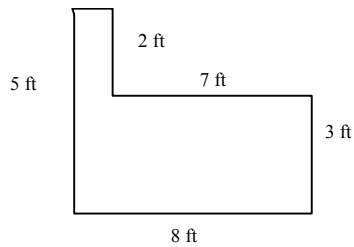
- 12) Write $\frac{23}{4}$ as a mixed number.
- a) $1\frac{6}{4}$ b) $5\frac{3}{4}$ c) $5\frac{4}{3}$ d) $1\frac{5}{4}$
- 13) Multiply: $2\frac{1}{5} \times 1\frac{1}{4}$
- a) $2\frac{3}{4}$ b) $\frac{1}{20}$ c) $\frac{19}{20}$ d) $2\frac{1}{20}$
- 14) Divide: $3\frac{3}{4} \div 4\frac{2}{3}$
- a) $17\frac{1}{2}$ b) $\frac{1}{2}$ c) $1\frac{1}{8}$ d) $\frac{45}{56}$
- 15) It took $5\frac{3}{4}$ gallons of gas to fill the tank of the family car. If $\frac{5}{8}$ of the tank was empty, how much gas does the tank hold?
- a) $4\frac{7}{8}$ gal b) $9\frac{1}{5}$ gal c) $1\frac{23}{32}$ gal d) $6\frac{3}{8}$ gal
- 16) For the fractions, find the LCD: $\frac{7}{9}, \frac{35}{36}, \frac{1}{8}$
- a) 72 b) 36 c) 144 d) 288
- 17) Add:
- $$\begin{array}{r} 2\frac{1}{7} \\ + 5\frac{1}{9} \\ \hline \end{array}$$
- a) $7\frac{16}{63}$ b) $7\frac{2}{63}$ c) $6\frac{16}{63}$ d) $\frac{16}{63}$
- 18) Irma has $8\frac{1}{2}$ yards of material. Her new skirt will take $3\frac{1}{5}$ yards. How much material will she have left after the skirt is made?
- a) $5\frac{3}{10}$ yd b) $11\frac{7}{10}$ yd c) $11\frac{2}{5}$ yd d) $8\frac{1}{5}$ yd
- 19) Add: $56.754 + 8.69$
- a) 57.623 b) 576.23 c) 64.454 d) 65.444
- 20) Marie had \$99.76 in her savings account. She then took out \$32.73. How much money did she have left in the account?
- a) \$133.49 b) \$132.49 c) \$66.03 d) \$67.03
- 21) Multiply: 5.42×0.012
- a) 65.04 b) 6.504 c) 0.006504 d) 0.06504
- 22) Divide: $2.43 \div 0.09$
- a) 2.7 b) 0.027 c) 27 d) 270
- 23) A discount audio store advertised a collection of hits from the 70's on 22 compact discs all for \$110.22. What is the cost of each disc?
- a) \$5.01 b) \$5.03 c) \$5.12 d) \$5.11

- 24) Write $2\frac{5}{8}$ in decimal form.
 a) 2.6 b) 2.05 c) 0.205 d) 2.625
- 25) Simplify: $2.4 \times 7.6 + 3.2 \div 4$
 a) 6.48 b) 19.04 c) 10.72 d) 22.24
- 26) A car rental agency charges \$55.23 per day plus \$0.47 per mile for a certain type of car. How much is the rental charge for a 3-day trip of 540 miles?
 a) \$397.89 b) \$419.49 c) \$365.49 d) \$408.69
- 27) For each, find the price for one taco and select which is the better price.
 a) 9 tacos for \$5.40 b) 7 tacos for \$4.27 c) 15 tacos for \$8.70 d) 8 tacos for \$4.96
- 28) Which of the following proportions is true?
 a) $\frac{40}{70} = \frac{4}{7}$ b) $\frac{4}{7} = \frac{16}{35}$ c) $\frac{4}{7} = \frac{12}{28}$ d) $\frac{16}{21} = \frac{4}{7}$
- 29) A pound of fertilizer covers 2700 sq ft of lawn. How many pounds are needed to cover a lawn measuring 270 by 30 ft? (8100 sq ft)
 a) 270 lb b) 6 lb c) 3 lb d) 30 lb
- 30) Write .013 as a percent.
 a) 0.0013% b) 0.00013% c) 0.13% d) 1.3%
- 31) Write $\frac{1}{5}$ as a percent.
 a) 15% b) 0.2% c) 20% d) 50%
- 32) Which value correctly completes the table?

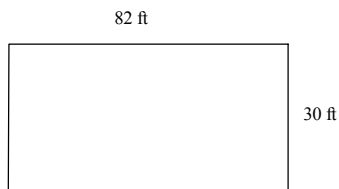
Percent	Fraction in Lowest Terms	Decimal
44%	$\frac{11}{25}$	

- a) none of these b) 4.4 c) 44 d) 0.44
- 33) What is 28% of 700?
 a) 196 b) 64 c) 394 d) 130
- 34) 6 is 40% of what number?
 a) 15 b) 667 c) 2.4 d) 0.15
- 35) Mario bought a pair of slacks priced for \$23.00. If the sales tax rate in Mario's state is 8%, what is the total amount paid for the slacks?
 a) \$1.84 b) \$24.84 c) \$18.40 d) \$41.40
- 36) Chuck bought a pair of shoes priced at \$40.00. If the sales tax rate in Chuck's state is 5%, how much is the sales tax on the shoes?
 a) \$20.00 b) \$2.00 c) \$42.00 d) \$62.00

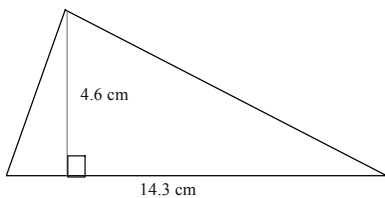
- 37) The circulation of a newsletter decreased from 1500 to 990. What was the percentage decrease in circulation?
 a) 66% b) 34% c) 151% d) 3.4%
- 38) An article regularly selling for \$33.55 is advertised at 60% off. Find the sale price.
 a) \$31.54 b) \$53.68 c) \$20.13 d) \$13.42
- 39) First State Bank charges 11% simple interest on personal loans. What is the total interest on a \$900 loan over 3 years?
 a) \$324.00 b) \$297.00 c) \$99.00 d) \$1197.00
- 40) Find the perimeter of a rectangle with length $13\frac{3}{8}$ feet and width $5\frac{1}{4}$ feet. Express the answer in feet.
 a) $12\frac{5}{12}$ ft b) $6\frac{5}{24}$ ft c) $18\frac{5}{8}$ ft d) $37\frac{1}{4}$ ft
- 41) Find the perimeter of the shape shown below.



- a) 14 ft b) 15 ft c) 26 ft d) 12 ft
- 42) Find the area of the rectangle.

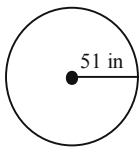


- a) 112 sq ft b) 2460 sq ft c) 1230 sq ft d) 224 sq ft
- 43) Find the area of the triangle.



- a) 15.445 sq cm b) 65.78 sq cm c) 131.56 sq cm d) 32.89 sq cm

44) Find the circumference of the circle.



- a) 2601π in b) 102π in c) 100π in d) 102π in

45) Find the supplement of an angle that is 20° .

- a) 70° b) 160° c) 40° d) 25°

46) Multiply: $-4(3)(-6)(-2)$

- a) 144 b) -144 c) -9 d) 9

47) Simplify: $(6)(9) - (3)(6) + 6 =$

- a) 30 b) 18 c) 312 d) 42

48) Find the value of the following proportion: $\frac{x}{5} = \frac{9}{15}$

- a) $x = 3$ b) $x = 9$ c) $x = 15$ d) $x = 45$

49) Write 250,000,000 in scientific notation.

- a) 2.5×10^6 b) 2.5×10^{-8} c) 2.5×10^8 d) 2.5×10^{-6}

50) Write 2.35×10^{-4} in standard notation.

- a) 23,500 b) .000235 c) .002235 d) 2,350

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Answers
2006

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|-----|-----|-------------------------|-----|-----|---------------------------------------|
| 1) | (b) | 5000 | 26) | (b) | \$419.49 |
| 2) | (d) | 15,209 | 27) | (c) | 15 tacos for \$8.70 |
| 3) | (c) | 4,900,361 | 28) | (a) | $\frac{40 \cdot 4}{70} = \frac{4}{7}$ |
| 4) | (d) | 1372 | 29) | (c) | 3 lb |
| 5) | (c) | 1350 | 30) | (d) | 1.3% |
| 6) | (a) | \$5280 | 31) | (c) | 20% |
| 7) | (a) | $34r^4$ | 32) | (d) | 0.44 |
| 8) | (c) | \$1230 | 33) | (a) | 196 |
| 9) | (b) | 55 | 34) | (a) | 15 |
| 10) | (c) | \$107,536 | 35) | (b) | \$24.84 |
| 11) | (c) | $2^2 \times 3 \times 7$ | 36) | (b) | \$2.00 |
| 12) | (b) | $5\frac{3}{4}$ | 37) | (b) | 34% |
| 13) | (a) | $2\frac{3}{4}$ | 38) | (d) | \$13.42 |
| 14) | (d) | $\frac{45}{56}$ | 39) | (b) | \$297.00 |
| 15) | (b) | $9\frac{1}{5}$ gal | 40) | (d) | $37\frac{1}{4}$ ft |
| 16) | (a) | 72 | 41) | (c) | 26 ft |
| 17) | (a) | $7\frac{16}{63}$ | 42) | (b) | 2460 sq ft |
| 18) | (a) | $5\frac{3}{10}$ yd | 43) | (d) | 32.89 sq cm |
| 19) | (d) | 65.444 | 44) | (b) | 102π in |
| 20) | (d) | \$67.03 | 45) | (b) | 160° |
| 21) | (d) | 0.06504 | 46) | (b) | -144 |
| 22) | (c) | 27 | 47) | (d) | 42 |
| 23) | (a) | \$5.01 | 48) | (a) | $x = 3$ |
| 24) | (d) | 2.625 | 49) | (c) | 2.5×10^8 |
| 25) | (b) | 19.04 | 50) | (b) | .000235 |