

## MA052

## **Final Exam**

Name:

3. Multiply: 
$$2 \times 3 \times 5 \times 9$$

5. Write this expression using exponents:  $5 \times 5 \times 5 \times 5$ 

**a.** 
$$5^2$$

6. Round to the thousands place: 35,709

7. Simplify, following the order of operations:  $5^2 - 2 \times 10 + 3^2 \times 2 - 20 + 4$ 

8. Professor Ranjan corrected some final exams, and it took him  $5\frac{1}{4}$  hours. His teaching assistant corrected the rest of the exams, and it took her  $8\frac{5}{6}$  hours. How many hours total did it take to correct all the exams?

**a.** 
$$14\frac{1}{12}$$
 hours

**b.** 
$$14\frac{3}{5}$$
 hours

c. 
$$13\frac{3}{5}$$
 hours

**b.** 
$$14\frac{3}{5}$$
 hours **c.**  $13\frac{3}{5}$  hours **d.**  $13\frac{3}{10}$  hours

9. David ran the Boston Marathon, 26 miles, in  $3\frac{1}{2}$  hours. What was his average rate of speed?

a. 
$$7\frac{1}{2}$$
 miles per hour

**b.** 
$$7\frac{4}{7}$$
 miles per hour

c. 
$$7\frac{3}{8}$$
 miles per hour

**a.** 
$$7\frac{1}{2}$$
 miles per hour **b.**  $7\frac{4}{7}$  miles per hour **c.**  $7\frac{3}{8}$  miles per hour **d.**  $7\frac{3}{7}$  miles per hour

10. Michael is a math tutor who charges \$25 per hour. Last month he made \$1,075 tutoring. How many total hours did he work as a tutor?

11. Simplify: 
$$\frac{822}{56}$$
.

a. 
$$\frac{28}{56}$$

a. 
$$\frac{28}{56}$$
 b.  $\frac{411}{28}$  c.  $\frac{411}{56}$  d.  $\frac{411}{14}$ 

c. 
$$\frac{41}{56}$$

d. 
$$\frac{411}{14}$$

12. Add:  $\frac{1}{3} + \frac{2}{7}$ 

a.  $\frac{3}{10}$  b.  $\frac{6}{8}$  c.  $\frac{13}{21}$  d.  $\frac{2}{21}$ 

**13.** Subtract:  $16\frac{1}{8} - 5\frac{3}{4}$  **a.**  $10\frac{3}{8}$  **b.**  $11\frac{1}{2}$  **c.**  $3\frac{1}{4}$  **d.**  $12\frac{1}{8}$ 

**14.** Multiply:  $\frac{5}{12} \times 2\frac{2}{3}$  a.  $1\frac{1}{9}$  b.  $2\frac{5}{9}$  c.  $\frac{5}{9}$  d.  $2\frac{1}{9}$ 

15. Divide:  $2\frac{1}{7} \div 3\frac{1}{4}$ 

a.  $6\frac{27}{28}$  b.  $\frac{60}{91}$  c.  $1\frac{2}{5}$  d.  $\frac{2}{3}$ 

16. What is the least common denominator of  $\frac{17}{50}$  and  $\frac{4}{15}$ ?

**a.** 50

c. 150

**d.** 750

17. A rectangular garden measures  $4\frac{7}{8}$  yards by  $9\frac{1}{4}$  yards. Find the area of the garden in square yards.

a.  $5\frac{7}{9}$  sq. yds.

**b.**  $36\frac{7}{32}$  sq. yds. **c.**  $45\frac{3}{32}$  sq. yds. **d.**  $8\frac{5}{8}$  sq. yds.

18. How many  $\frac{3}{4}$ -pound packages of meat can be prepared from 60 pounds of meat?

a. 80 packages

b. 45 packages

c. 60 packages

d. 50 packages

19. Martha bought a bolt of fabric. She gave  $\frac{1}{3}$  of it to her daughter and  $\frac{2}{5}$  of it to her neighbor. What portion of the bolt did she have left?

a.  $\frac{13}{15}$  bolt

b.  $\frac{2}{5}$  bolt

c.  $\frac{12}{15}$  bolt

20. Mary Ann follows her investments in the stock market daily. Over a five-day period she gained \$98.87, gained \$14.24, lost \$88.18, gained \$23.44, and lost \$49.00. How much did she lose overall?

Name	:	 	 <del></del>
Date:		 	 

21.	What decimal is written in	word	ls "five	and four	hundred	sixty-seven	ten thousar	idths"?

- **a.** 5.467
- **b.** 5.0467
- c. 5,647,000
- **d.** 0.5467

22. Write 0.0155 as a fraction in simplest form.

- a.  $\frac{3}{2000}$
- **b.**  $\frac{31}{200}$
- c.  $\frac{31}{2000}$
- d.  $\frac{3}{20}$

23. Order 0.709, 0.710, 0.79, and 0.079 from smallest to largest.

**a.** 0.079, 0.709, 0.710, 0.79

**b.** 0.079, 0.79, 0.709, 0.710

**c.** 0.79, 0.709, 0.710, 0.079

**d.** 0.79, 0.079, 0.709, 0.710

24. Round 57.30945 to the nearest thousandth.

- a. 57.3095
- **b.** 57.309
- c. 57.31
- **d.** 57.3

**25.** Multiply:  $2.04518 \times 10^3$ 

- **a.** 204.518
- **b.** 0.00204518
- c. 2045.18
- **d.** 0.0204518

**26.** Evaluate:  $8.25 \div 0.15$ 

- a. 55
- **b.** 0.55
- **c.** 0.1375
- d. 75

27. Find the sum: 9+6.9+0.223

- **a.** 0.292
- **b.** 0.382
- **c.** 16.123
- **d.** 7.123

**28.** Find the difference: 6.004 - 0.4

- **a.** 2.004
- h. 6

- c. 5.604
- **d.** 5.964

**29.** Evaluate: 6-0.881+4.3

- a. 7.78
- **b.** 2.381
- c. 2.219
- **d.** 9.419

**30.** Multiply:  $7.251 \times 0.027$ 

- a. 1.9575
- **b.** 19.5777
- **c.** 0.19575
- **d.** 0.195777

31. Divide and round your answer to the nearest tenth: 0.34)9.67

- a. 32.3
- **b.** 28.4
- c. 22.5
- **d.** 28.7

**32.** Write  $\frac{3}{8}$  as a decimal.

- **a.** 0.4
- **b.** 2.6
- **c.** 0.375
- **d.** 0.4375

**33.** Evaluate:  $(0.24)^2 \div 0.16 + 0.32 \times 0.1$ 

- a. 0.068
- **b.** 0.012
- **c.** 0.3
- **d.** 0.392

**34.** A butcher has 66 pounds of meat. He wants to pack the meat into packages weighing 0.75 pounds each. How many packages can he make?

- a. 49.5 packages
- b. 80 packages
- c. 86 packages
- d. 88 packages