

Name _____ Date _____ Score _____

School _____ Grade _____

2009 MathEdge Speed Math Contest

Intermediate Level

NO calculators

INSTRUCTIONS

- Time limit: **15 minutes**
- You **may NOT use calculators** on this test.
- Some multiple-choice questions do not have the correct answer as one of the choices. On those questions, the response is e) not given
i.e. $3 + 4 =$ a) 4 b) 5 c) 6 d) 8 e) Not given
- If a division problem has a remainder (for instance $21 \div 5 = ??$), the answer is in this form: **4 r 1**
- All fractions are expressed in lowest terms.
- All answers that are improper fractions are written as mixed numerals or whole numbers.

i.e. $\frac{4}{2}$ should be written as 2

$\frac{7}{3}$ should be written as $2\frac{1}{3}$

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1. $11 \times 33 =$ a) 363 b) 333 c) 323 d) 343 e) not given
 2. $147 + 28 =$ a) 165 b) 175 c) 185 d) 195 e) not given
 3. $58 - 29 =$ a) 21 b) 25 c) 27 d) 29 e) not given
 4. $217 \div 3 =$ a) 70 r 1 b) 71 r 1 c) 72 r 1 d) 70 r 2 e) not given
 5. $54 + 98 =$ a) 144 b) 154 c) 148 d) 156 e) not given
 6. $7(1 + 4) + 25 =$ a) 32 b) 60 c) 53 d) 175 e) not given
 7. $(1 \times 3) + (2 \times 3) + (3 \times 3) =$ a) 9 b) 18 c) 36 d) 45 e) not given
 8. $\$8.94 + \$2.99 =$ a) \$10.93 b) \$11.93 c) \$12.93 d) \$13.93 e) not given
 9. $50 + 74 + 26 + 20 =$ a) 176 b) 180 c) 170 d) 184 e) not given
 10. $349 + 291 =$ a) 620 b) 610 c) 530 d) 540 e) not given
 11. $1,000 - 364 =$ a) 726 b) 736 c) 626 d) 636 e) not given
 12. $72.6 - 18.8 =$ a) 53.7 b) 52.8 c) 52.2 d) 54.2 e) not given
 13. $\frac{12}{30}$ simplifies to a) $\frac{3}{5}$ b) $\frac{4}{15}$ c) $\frac{2}{5}$ d) $\frac{6}{5}$ e) not given
 14. $200 - 73 =$ a) 137 b) 127 c) 117 d) 273 e) not given
 15. $\left(\frac{3}{8}\right) + \left(\frac{1}{8}\right) =$ a) $\frac{4}{16}$ b) $\frac{1}{2}$ c) $\frac{1}{8}$ d) 2 e) not given
 16. $(100 \div 10) \div 10 =$ a) 0 b) 1 c) 11 d) 20 e) not given

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17. $36 \times 30 =$ a) 108 b) 180 c) 1080 d) 10800 e) not given
18. $25 \times 15 =$ a) 300 b) 325 c) 350 d) 375 e) not given
19. $110 \times 400 =$ a) 440 b) 4,400 c) 44,000 d) 44,400 e) not given
20. $107 - 2 \times 5 =$ a) 500 b) 525 c) 21 d) 97 e) not given
21. $325 \div 6 =$ a) 54 r 5 b) 53 r 5 c) 55 r 2 d) 54 r 3 e) not given
22. $65 \div \frac{1}{2}$ a) 32 r 1 b) 32.5 c) 130 c) 33 e) not given
23. One dozen pears sell for \$5.40. How much do you spend on 2 pears at the same price per pear?
a) \$.60 b) \$.90 c) \$.45 d) \$1.35 e) not given
24. Monday I bike $\frac{1}{2}$ mile. Each day I bike twice as far as the day before. What day will I bike at least 12 miles?
a) Thursday b) Saturday c) Friday d) Sunday e) not given
25. What is the probability of owning a dog in my class if 4 kids own cats, 2 kids own gerbils, and 5 kids own dogs? Write your answer as a common fraction.
a) $\frac{5}{9}$ b) $\frac{5}{7}$ c) $\frac{5}{11}$ d) $\frac{1}{4}$ e) not given
26. How many different outfits could you wear if you had 1 pair of shoes, 8 shirts, 3 pair of jeans?
a) 8 b) 11 c) 12 d) 24 e) not given

For questions #27-31 choose the closest estimate to the answer.

27. $302 \times 604 =$
a) 1800 b) 18000 c) 180,000 d) 1,800,000 e) 18,000,000
28. $1\frac{3}{4} + 2\frac{7}{8} + 4\frac{1}{4} =$ a) 7 b) 8 c) 9 d) 10 e) 11
29. $0.25 \times 101.35 =$ a) 24 b) 25 c) 26 d) 27 e) 28
30. $15 \overline{)294}$ a) 18 b) 19 c) 20 d) 25 e) 30

31. $16,872 + 498 =$ a) 17,200 b) 17,300 c) 17,400 d) 17,500 e) 18,000

#32-35: Write the next number in the sequence:

32. 20, 16, 12, ... a) 10 b) 8 c) 6 d) 4 e) not given

33. 120, 60, 30, ... a) 20 b) 15 c) 10 d) 0 e) not given

34. 2, 4, 8, 16, ... a) 64 b) 24 c) 30 d) 22 e) not given

35. 105, 117, 129, 141, ... a) 153 b) 149 c) 147 d) 155 e) not given

For questions #36-40, there are four problems that have been worked. One of the problems on each question has an incorrect answer. Identify the problem that has the incorrect answer. *Hint:* Use estimation to quickly **identify the incorrect answer**.

36. a)
$$\begin{array}{r} 613,240 \\ 100,987 \\ + 437,922 \\ \hline 1,152,149 \end{array}$$
 b)
$$\begin{array}{r} 87,962 \\ - 52,678 \\ \hline 35,284 \end{array}$$
 c)
$$\begin{array}{r} 76 \\ \times 51 \\ \hline 3,877 \end{array}$$
 d) $248 \div 6 = 41 \text{ r } 2$ e) not given

37. a)
$$\begin{array}{r} 51,593 \\ + 80,147 \\ \hline 131,740 \end{array}$$
 b)
$$\begin{array}{r} 200,190 \\ - 133,588 \\ \hline 66,412 \end{array}$$
 c)
$$\begin{array}{r} 48 \\ \times 48 \\ \hline 2304 \end{array}$$
 d) $210 \div 5 = 42$ e) not given

38. a)
$$\begin{array}{r} 99,895 \\ + 910,103 \\ \hline 1,190,988 \end{array}$$
 b)
$$\begin{array}{r} 90,730 \\ - 89,988 \\ \hline 742 \end{array}$$
 c)
$$\begin{array}{r} 699 \\ \times 5 \\ \hline 3495 \end{array}$$
 d) $243 \div 3 = 81$ e) not given

39. $7\frac{1}{2} + 5\frac{3}{4} + 4\frac{7}{8} =$

a) $16\frac{7}{8}$ b) $17\frac{1}{8}$ c) $17\frac{7}{8}$ d) $18\frac{1}{8}$ e) not given

40. If you want an A in class, you must average 90%. If your first 3 test scores were 78, 95, and 90, what must your 4th test score be?

a) 93 b) 95 c) 97 d) 99 e) not given

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|-----|---|---|---|---|---|-----|---|---|---|---|---|
| 1. | a | b | c | d | e | 21. | a | b | c | d | e |
| 2. | a | b | c | d | e | 22. | a | b | c | d | e |
| 3. | a | b | c | d | e | 23. | a | b | c | d | e |
| 4. | a | b | c | d | e | 24. | a | b | c | d | e |
| 5. | a | b | c | d | e | 25. | a | b | c | d | e |
| 6. | a | b | c | d | e | 26. | a | b | c | d | e |
| 7. | a | b | c | d | e | 27. | a | b | c | d | e |
| 8. | a | b | c | d | e | 28. | a | b | c | d | e |
| 9. | a | b | c | d | e | 29. | a | b | c | d | e |
| 10. | a | b | c | d | e | 30. | a | b | c | d | e |
| 11. | a | b | c | d | e | 31. | a | b | c | d | e |
| 12. | a | b | c | d | e | 32. | a | b | c | d | e |
| 13. | a | b | c | d | e | 33. | a | b | c | d | e |
| 14. | a | b | c | d | e | 34. | a | b | c | d | e |
| 15. | a | b | c | d | e | 35. | a | b | c | d | e |
| 16. | a | b | c | d | e | 36. | a | b | c | d | e |
| 17. | a | b | c | d | e | 37. | a | b | c | d | e |
| 18. | a | b | c | d | e | 38. | a | b | c | d | e |
| 19. | a | b | c | d | e | 39. | a | b | c | d | e |
| 20. | a | b | c | d | e | 40. | a | b | c | d | e |

