

Lidta sub city Tesfa kokeb cluster center 2015

E.C Grade 8th mathematics model exam

- Which one of the following absolute value equations has only one solution
A. $3-2|x-5|=9$ B. $8-|x+2|=0$ C. $4|2x-1|=0$ D. $7-2|x+5|=0$
- Which of the following statement is not true
A. $-15 < 1.5$ B. $3\frac{5}{4} < \frac{19}{5}$ C. $|- \frac{3}{5}| = \frac{3}{5}$ D. $3\frac{2}{5} > 2\frac{3}{5}$
- The value of $-\frac{2}{3} \times \frac{5}{4} \times \frac{3}{2} \times (-\frac{6}{5}) \times (-2)$
A. -1 B. -2 C. -3 D. 2
- Which of the following numbers is Not a rational number?
A. 0 B. 0.6 C. $-\frac{7}{4}$ D. $\sqrt{3}$
- Which of the following statement is not true
A. $|-5.7| < |7.5|$ B. $|-6+10| > |-1-4|$
C. $|0.3| + |-0.7| = 1$ D. $|-7.5| - |-2.5| = 5$
- How long will take birr 500 to get birr 50 simple interest at rate of 10%?
A. 1 year B. $\frac{1}{2}$ year C. 2 year D. 3 year
- $\frac{-3+7 \times 6}{17-16 \div 4}$ is equal to
A. 1 B. 2 C. 3 D. 4
- On the number line, which one of the following rational number is located half way between -4 and -3?
A. $-\frac{9}{2}$ B. $-\frac{7}{2}$ C. $-\frac{5}{2}$ D. $-\frac{3}{2}$
- Which of the following statement is true about the set of numbers denoted by N,W,Z AND Q ?
A. $Q^+ \subseteq N$ B. $W \subseteq Q^+$ C. $W \subseteq Q$ D. $Q \subseteq Q^+$
- Which of the following lists of numbers written an increasing order
A. $\frac{1}{3}, \frac{2}{5}, \frac{3}{4}, \frac{-7}{7}$ B. $-\frac{7}{7}, \frac{2}{5}, \frac{1}{3}, \frac{3}{4}$ C. $-\frac{7}{7}, \frac{1}{3}, \frac{2}{5}, \frac{3}{4}$
D. $\frac{3}{4}, \frac{2}{5}, \frac{1}{3}, \frac{-7}{7}$
- When the expression $2\frac{2}{3} + 4\frac{1}{4} - 5\frac{1}{6} + \frac{2}{3}$ is simplified, the result is
A. $1\frac{1}{4}$ B. $2\frac{5}{12}$ C. $-3\frac{1}{3}$ D. $2\frac{1}{6}$
- What property is used in $[2+3] \times 4 = [2 \times 4] + [3 \times 4]$?
A. Commutative B. associative C. distributive D. property of 1
- Which of the following statement is false about in the set of numbers?
A. The sum of two natural numbers is always a natural number.
B. The product of two whole numbers is always a whole number.

- C. The question of two integers is always an integer.
 - D. The difference of two integers is always an integer.
14. Abebe deposited birr 20,000 at Awash bank at the rate of 10% simple interest for 3 years. What is the amount at the end of 3 years?
- A. 6,000 birr B. 26,000 birr C. 20,600 birr D. 2,600 birr

15. How many $\frac{3}{4}$ groups are in 12?

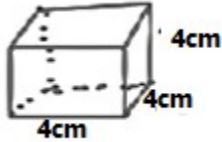
- A. $\frac{45}{4}$ B. $\frac{51}{4}$ C. 9 D. 16

16. Of the following, which is true?

- A. $\sqrt[3]{8} = 2$ B. $\sqrt{8} = 2$ C. $\sqrt[3]{16} = 4$ D. $\sqrt{16} = 8$

17. Find the volume of the cube from the figure

- A. 32 cm^3 B. 72 cm^3 C. 64 cm^3 D. 96 cm^3



18. If $(5.05)^2 = 22.55$, then the value of $\sqrt{22.55}$ is

- A. 5.05 B. 0.505 C. 50.5 D. 505

19. The exponential form of $\sqrt[3]{10}$ is

- A. 10^3 B. 3^{10} C. $10^{1/3}$ D. $3^{1/10}$

20. The cube root of -1000 is

- A. 100 B. -100 C. 10 D. -10

21. Which of the following show the prime factorization of 216

- A. $2^5 \times 3^4$ B. $2^3 \times 3^3$ C. $2^4 \times 3^3$ D. $2^3 \times 3^4$

22. Which one of the following is a perfect square?

- A. 6 B. 8 C. 12 D. 16

23. If $x = 64$, the value of $\sqrt{x}$ is ____.

- A. 32 B. 16 C. 8 D. 4

24. Find the prime factorization of 324.

- A. $2^3 \times 5^3$ B. $2^3 \times 3^5$ C. $2^3 \times 3^4$ D. $2^2 \times 3^4$

25. If $x = 4$ and $y = 9$, the square root of x/y is ____.

- A. $8/18$ B. $2/3$ C. $4/9$ D. $3/2$

26. Which of the following is true about cubic numbers?

- A. $(\frac{a}{b})^3 = \frac{a^3}{b}$ B. $(ab)^3 = a^3b$ C. $(\frac{a}{b})^3 = \frac{a^3}{b^3}$ D. $(axa)^3 = a^3$

27. Which of the following expresses 512?

- A. 6^3 B. 7^3 C. 8^3 D. 9^3

28. Simplify $\sqrt[3]{\frac{x^{15}}{x^{12}}}$

A. x^4

B. x^3

C. x^2

D. x

29. In which quadrant does the point (3,-3) lie

A. First quadrant

B. second quadrant

C. third quadrant

D. fourth quadrant

30. What values of x satisfy the inequality $-2x + 1 > 5$

A. $x > 4$

B. $x > -2$

C. $x < 4$

D. $x < -2$

31. Find the value of y-intercept from the equation $\frac{y}{3} = -2x - \frac{1}{2}$

A. $-\frac{1}{2}$

B. 1

C. $-\frac{3}{2}$

D. $\frac{3}{2}$

32. Which of the following question is equivalent to $\frac{1}{3}x - 5 = 4x + 6$

A. $2x - 6 = 4$

B. $-3x - 1 = 0$

C. $2x + 6 = 0$

D. $5x = -2x - 3$

33. Three years ago the sum of the ages of a man and his son was 52 years now the man is 18 years

older than his son. What is the present age of his son?

A. 20

B. 18

C. 40

D. 14

34. Which of the following equation of lines passes through 1st and 3rd quadrant?

A. $y = -5x$

B. $y = -\frac{3}{2}x$

C. $y + 2x = 0$

D. $y = 7x$

35. The sum of the age of a girl and her brother is 34 . The girl is 8 years older than her brother. How old

is her brother

A. 21

B. 13

C. 11

D. 23

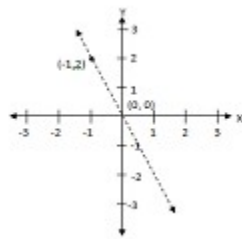
36. The equation of the graph is:

A. $y = 2x$

B. $y = -2x$

C. $y = x$

D. $y = -x$



37. If the point P (a,3) lies on the given by the equation $12x - 2y = 0$, then find the value of a.

A. $1/18$

B. -2

C. $1/2$

D. 18

38. Which of the following are not linear inequalities?

A. $-\frac{3}{2}x \leq 6x + 3$

B. $2x \geq x + 2^2$

C. $x^2 - 1 < \frac{1}{2}x - 5$

D. $7x + \frac{1}{2}x = 4$

39. Given $-2(2x-7) > 2$,

Step1: $-4x + 14 > 2$

Step2: $-4x > 2-14$

Step 3: $-4x > -12$

Step 4: $x > 3$

Which operation is not correct?

A. Between given and step 1

B. between step 1 and step 2

C. between step 2 and step 3

D. between step 3 and step 4

40. Which one of the following inequalities is not equivalent to $\frac{1}{2}(3x-2) > 5$?

A. $3x-2 > 10$
 $2x-8 > 0$

B. $3x > 12$

C. $2x-1 > 9$

D.

Mathematics model exam I

Answer

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