

Basic Mathematics Practice Questions

1. An instrument store gives a 10% discount to all students off the original cost of an instrument. During a back to school sale an additional 15% is taken off the discounted price. Julie, a student at the local high school, purchases a flute for \$306. How much did it originally cost?

- A. \$325
- B. \$375
- C. \$400
- D. \$408
- E. \$425

2. If $y(x-1)=z$ then $x=$

- A. $y-z$
- B. $z/y + 1$
- C. $y(z-1)$
- D. $z(y-1)$
- E. $1-zy$

3. Which of the following values is NOT equal to $34(58+9)$?

- A. 34×67
- B. $58(34+9)$
- C. $34 \times 58 + 34 \times 9$
- D. $1,972 + 306$
- E. $(9 + 58) 34$

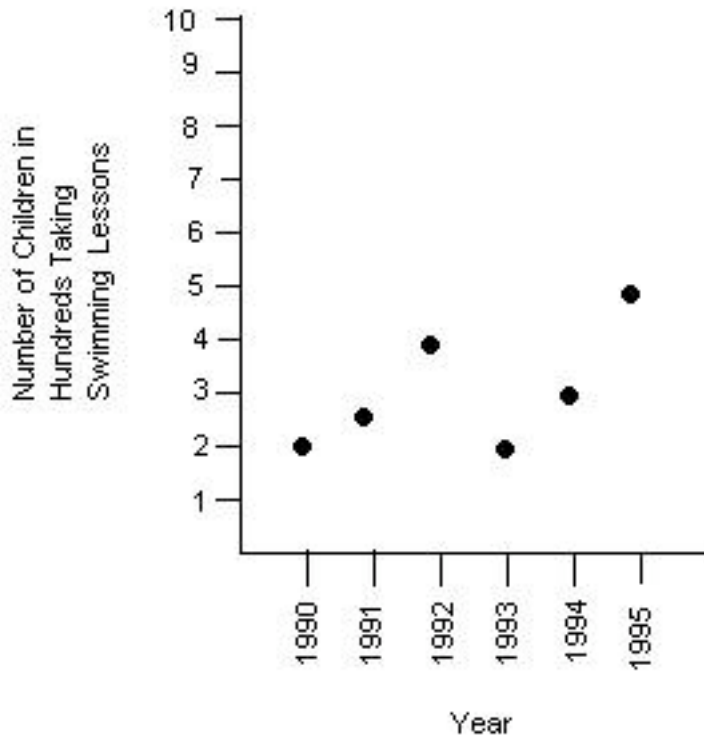
4. Two angles of a triangle measure 15° and 85° . What is the measure for the third angle?

- A. 50°
- B. 55°
- C. 60°
- D. 80°
- E. 90°

5. If 5 ounces is equal to 140 grams, then 2 pounds of ground meat is equal to how many grams?

- A. 863
- B. 878
- C. 896
- D. 915
- E. 932

6. Which year did the most children take swimming lessons?



- A. 1990
- B. 1991
- C. 1992
- D. 1994
- E. 1995

7. Between which year did the largest decrease in children taking swimming lessons occur?

- A. 1990-1991
- B. 1991-1992
- C. 1992-1993
- D. 1993-1994
- E. 1994-1995

8. What was the average number of children taking swim lessons from 1990 to 1995?

- A. 250
- B. 308
- C. 385
- D. 450
- E. 1,850

9. Which of the following is equal to 5.93×10^{-2} ?

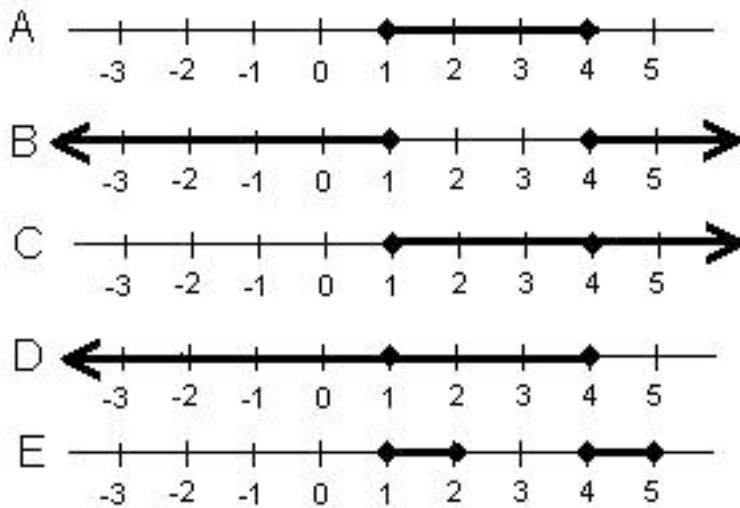
- A. 0.0593
- B. 0.00593
- C. 593

- D. 5930
- E. 59300

10. On a Map, 1 inch represents 20 miles. The distance between 2 towns is $6 \frac{1}{5}$ inches. How many miles are actually between the two towns?

- A. 65 miles
- B. 84 miles
- C. 124 miles
- D. 138 miles
- E. 145 miles

11. Which of the following is a correct graph of $x > 1$, $x < 4$?



- A. Line A
- B. Line B
- C. Line C
- D. Line D
- E. Line E

12. How many cubed pieces of fudge that are 3 inches on an edge can be packed into a Christmas tin that is 9 inches deep by 12 inches wide by 8 inches high with the lid still being able to be closed?

- A. 18
- B. 24
- C. 32
- D. 36
- E. 43

13. Sarah is twice as old as her youngest brother. If the difference between their ages is 15 years. How old is her youngest brother?

- A. 10
- B. 15
- C. 20
- D. 25
- E. 30

14. Which of the following fractions is equal to $\frac{5}{6}$?

- A. $\frac{20}{30}$
- B. $\frac{15}{24}$
- C. $\frac{25}{30}$
- D. $\frac{40}{54}$
- E. $\frac{2}{7}$

15. What will it cost to tile a kitchen floor that is 12 feet wide by 20 feet long if the tile cost \$8.91 per square yard?

- A. \$224.51
- B. \$237.60
- C. \$246.55
- D. \$271.38
- E. \$282.32

16. In a writing competition, the first place winner receives $\frac{1}{2}$ of the prize money. The second runner up receives $\frac{1}{4}$ of what the winner won. What was the total amount of prize money distributed if the winner receives \$6,000?

- A. \$6,000
- B. \$8,500
- C. \$12,000
- D. \$15,000
- E. \$18,500

17. You are lying 120 ft away from a tree that is 50 feet tall. You look up at the top of the tree. Approximately how far is your hear from the top of the tree in a straight line?

- A. 50 feet
- B. 75 feet
- C. 120 feet
- D. 130 feet
- E. 150 feet

18. A cyclist bikes x distance at 10 miles per hour and returns over the same path at 8 miles per hour. What is the cyclist's average rate for the round trip in miles per hour?

- A. 8.1
- B. 8.3
- C. 8.6
- D. 8.9
- E. 9.0

19. If edging cost \$2.32 per 12-inch stone, and you want a double layer of edging around your flower bed that is 6 yards by 1 yard. How much will edging you flower bed cost?

- A. \$32.48
- B. \$64.96
- C. \$97.44
- D. \$129.92
- E. \$194.88

20. If $3x=6x-15$ then $x + 8=$

- A. 5
- B. 10
- C. 11
- D. 12
- E. 13

21. The number of milliliters in 1 liter is

- A. 10,000
- B. 1,000
- C. 0.1
- D. 0.01
- E. 0.001

22. The cost to ride on a ferry is \$5.00 per vehicle and driver with an additional cost of 50 cents per passenger. If the charge to get on the ferry is \$6.50, how many people were in the vehicle?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

23. What is $\frac{1}{9}$ of 9?

- A. $\frac{1}{9}$
- B. 0
- C. 1
- D. 2
- E. 3

24. In his pocket, a boy has 3 red marbles, 4 blue marbles, and 4 green marbles. How many will he have to take out of his pocket to ensure that he has taken out at least one of each color?

- A. 3
- B. 7
- C. 8
- D. 9
- E. 11

25. Which fraction is equal to 0.20%?

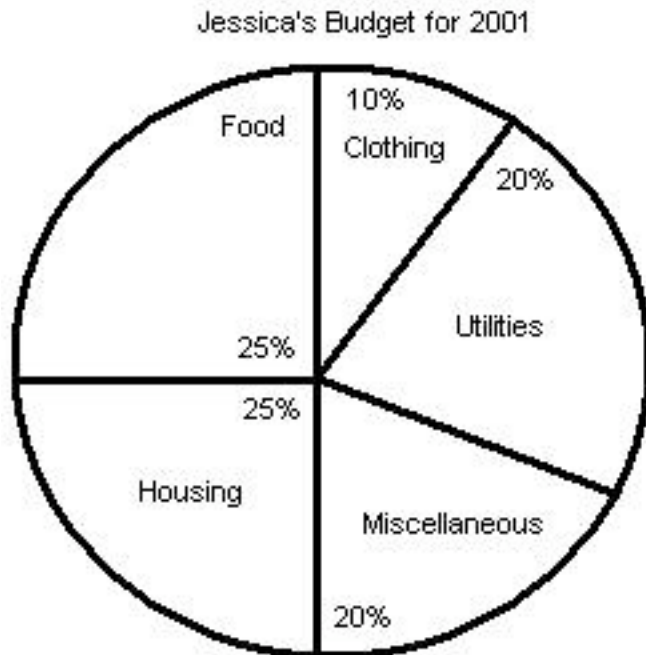
- A. $\frac{1}{20}$
- B. $\frac{1}{40}$
- C. $\frac{1}{50}$

- D. 1/400
- E. 1/500

26. Find the missing term in the following sequence: 4, 9, 19, __, 79

- A. 36
- B. 37
- C. 38
- D. 39
- E. 40

27. How much money did Jessica's budget allow for housing in April of 2001?



Jessica's Monthly Earnings from January 2001 to June 2001

January	\$2578
February	\$2432
March	\$2668
April	\$2490
May	\$2622
June	\$2555

- A. \$617.80
- B. \$620.92
- C. \$622.50
- D. \$626.38
- E. \$633.20

28. What was the average amount of money that Jessica's budget allowed for clothing the first six months of 2001?

- A. \$249.90
- B. \$250.40
- C. \$251.32

- D. \$253.33
- E. \$255.75

29. If Jessica only spent 20% instead of the 25% allotment for food in May of 2001, how much did she save?

- A. \$131.10
- B. \$144.30
- C. \$148.32
- D. \$152.22
- E. \$153.33

30. Jonathan can type a 20 page document in 40 minutes, Susan can type it in 30 minutes, and Jack can type it in 24 minutes. Working together, how much time will it take them to type the same document?

- A. 5 minutes
- B. 10 minutes
- C. 15 minutes
- D. 18 minutes
- E. 20 minutes

31. Of the following fractions, which is less than $\frac{2}{3}$?

- A. $\frac{7}{8}$
- B. $\frac{5}{6}$
- C. $\frac{3}{4}$
- D. $\frac{3}{5}$
- E. $\frac{5}{7}$

32. A hockey team won 6 games and lost 8. What is the ratio of wins to number of games?

- A. $\frac{6}{8}$
- B. $\frac{8}{6}$
- C. $\frac{3}{7}$
- D. $\frac{8}{14}$
- E. $\frac{6}{7}$

33. Sue receives a base salary of \$90 weekly plus a 12% commission on all sales. Sue had \$3,000 in sales this week. How much did she make total?

- A. \$375
- B. \$450
- C. \$480
- D. \$510
- E. \$525

34. If the perimeter of a rectangular house is $25\frac{1}{3}$ yards, and the length is 22 feet. What is the width?

- A. 16 feet
- B. 35 feet
- C. 37 feet

- D. 40 feet
- E. 42 feet

35. Jimmy made a 15% profit on the sale of a custom designed boat, and the original cost of the boat was \$15,000. The boat sold for how much?

- A. \$17,250.00
- B. \$16,540.44
- C. \$16,230.34
- D. \$15,980.55
- E. \$15,870.88

36. A recent study showed that an increase in body weight by 10 kilograms resulted in a 0.15% increase in heart disease. What fraction is equal to 0.15%?

- A. $\frac{3}{2000}$
- B. $\frac{2}{750}$
- C. $\frac{7}{4000}$
- D. $\frac{5}{3462}$
- E. $\frac{1}{500}$

37. $6.334 \times 10^4 =$

- A. 0.0006334
- B. 0.06334
- C. 6334
- D. 63340
- E. 633400

38. If $3x + 5x = -8$, then $x + 1 =$

- A. -2
- B. -1
- C. 0
- D. 1
- E. 2

39. Two angle in a triangle equal 120° . What is the measure of the third angle?

- A. 60°
- B. 70°
- C. 80°
- D. 90°
- E. 120°

40. Which of the following would be an appropriate unit to measure sugar for a cookie recipe?

- A. liters
- B. cups
- C. quarts
- D. kilograms
- E. pounds

