

Number Sense

1. The radius of the earth's orbit is 150,000,000,000 meters. What is this number in scientific notation?

A 1.5×10^{-11}
B 1.5×10^{11}
C 15×10^{10}
D 150×10^9

M00213

2. $3.6 \times 10^2 =$

A 3.600
B 36
C 360
D 3,600

M00036

3. The five members of a band are getting new outfits. Shirts cost \$12 each, pants cost \$29 each, and boots cost \$49 a pair. What is the total cost of the new outfits for all of the members?

A \$90
B \$95
C \$450
D \$500

M00331

4. $\frac{11}{12} - \left(\frac{1}{3} - \frac{1}{4} \right) =$

A $\frac{1}{3}$
B $\frac{3}{4}$
C $\frac{5}{6}$
D $\frac{9}{5}$

M02048

5. Which of the following numerical expressions results in a negative number?

A $(-7) + (-3)$
B $(-3) + (7)$
C $(3) + (7)$
D $(3) + (-7) + (11)$

M00116

6. One hundred is multiplied by a number between 0 and 1. The answer has to be

A less than 0.
B between 0 and 50 but not 25.
C between 0 and 100 but not 50.
D between 0 and 100.

M00275

Number Sense

7. John uses $\frac{2}{3}$ of a cup of oats per serving to make oatmeal. How many cups of oats does he need to make 6 servings?

A $2\frac{2}{3}$
B 4
C $5\frac{1}{3}$
D 9

M23015

8. If Freya makes 4 of her 5 free throws in a basketball game, what is her free throw shooting percentage?

A 20%
B 40%
C 80%
D 90%

M00223

9. Some students attend school 180 of the 365 days in a year. About what part of the year do they attend school?

A 18%
B 50%
C 75%
D 180%

M00047

10. What number equals $\frac{3}{8}$?

A 0.267
B 0.375
C 2.67
D 3.75

M13470

11. The cost of an afternoon movie ticket last year was \$4.00. This year an afternoon movie ticket costs \$5.00. What is the percent increase of the ticket from last year to this year?

A 10%
B 20%
C 25%
D 40%

M02158

12. The price of a calculator has decreased from \$12.00 to \$9.00. What is the percent of decrease?

A 3%
B 25%
C 33%
D 75%

M02868

13. The weekly sales of a magazine increased from 500,000 to 600,000. By what percent did the magazine sales increase?

A 17%
B 20%
C 83%
D 120%

M11242

14. Sally puts \$200.00 in a bank account. Each year the account earns 8% simple interest. How much interest will be earned in three years?

A \$16.00
B \$24.00
C \$48.00
D \$160.00

M02119

Number Sense

15. A pair of jeans regularly sells for \$24.00. They are on sale for 25% off. What is the sale price of the jeans?

A \$6.00
B \$18.00
C \$20.00
D \$30.00

M02870

16. A CD player regularly sells for \$80. It is on sale for 20% off. What is the sale price of the CD player?

A \$16
B \$60
C \$64
D \$96

M02425

17. Jana bought a car for \$4200 and later sold it for a 30% profit. How much did Jana sell the car for?

A \$1260
B \$2940
C \$5460
D \$7140

M10580

18. A salesperson at a clothing store earns a 2% commission on all sales. How much commission does the salesperson earn on a \$300 sale?

A \$6
B \$15
C \$60
D \$150

M20470

19. Which number equals $(2)^{-4}$?

A -8
B $-\frac{1}{16}$
C $\frac{1}{16}$
D $\frac{1}{8}$

M10015

20. $\frac{10^{-2}}{10^{-4}} =$

A 10^{-6}
B 10^{-2}
C 10^2
D 10^8

M02832

21. Which of the following is equivalent to $7^{-6} \cdot 7^4$?

A 7^{-24}
B 7^{-10}
C 7^{-2}
D 7^2

M12679

Number Sense

22. Which fraction is equivalent to $\frac{5}{6} + \frac{7}{8}$?

- A $\frac{35}{48}$
- B $\frac{6}{7}$
- C $\frac{20}{21}$
- D $\frac{41}{24}$

M12713

23. Which of the following is the prime factored form of the lowest common denominator of $\frac{7}{10} + \frac{8}{15}$?

- A 5×1
- B $2 \times 3 \times 5$
- C $2 \times 5 \times 3 \times 5$
- D 10×15

M02826

24. What is $\frac{3}{4} - \frac{1}{6}$?

- A $\frac{1}{6}$
- B $\frac{1}{3}$
- C $\frac{7}{12}$
- D $\frac{11}{12}$

M13552

25. $(3^8)^2 =$

- A 3^4
- B 3^6
- C 3^{10}
- D 3^{16}

M02406

26. $4^3 \times 4^2 =$

- A 4^5
- B 4^6
- C 16^5
- D 16^6

M02661

27. What is $6^2 \cdot 2^2$?

- A 32
- B 48
- C 144
- D 256

M22029

28. The square root of 150 is between

- A 10 and 11.
- B 11 and 12.
- C 12 and 13.
- D 13 and 14.

M02666

29. The square of a whole number is between 1,500 and 1,600. The number must be between

- A 30 and 35.
- B 35 and 40.
- C 40 and 45.
- D 45 and 50.

M00313

Number Sense

30. Between which two integers is the value of $\sqrt{61}$?

- A 6 and 7
- B 7 and 8
- C 8 and 9
- D 9 and 10

M22059

33. Which number has the greatest absolute value?

- A -17
- B -13
- C 15
- D 19

M12795

31. If $|x| = 3$, what is the value of x ?

- A -3 or 0
- B -3 or 3
- C 0 or 3
- D -9 or 9

M02122

32. What is the absolute value of -4 ?

- A -4
- B $-\frac{1}{4}$
- C $\frac{1}{4}$
- D 4

M02667