Multiple Choice Questions (MCQs)

CLASS: VII

SUBJECT: MATHS

Chapter - 1

Question 1) To distinguish from negative numbers, the natural numbers are called.
(a) negative numbers (b) positive integers (c) rational numbers (d) Natural numbers

Question 2) The additive inverse of an integer 'a' is the integer
(a) 1 (b) 0 (c) a (d) – a

Question 3) Multiplication distributes over addition and subtraction.
(a) Distributive Property (b) Identity property (c) Closure property (d) Associative property

Question 4) The _____ of a number is the distance between 0 and the number on the number line
(a) Integer (b) absolute value (c) closure property (d) Identity property

Question 5) You write an essay for your final exam worth 40 marks. The teacher deducts 12 points for incorrect grammar and gave 7 bonus points for creativity. Which expression does not represent your final score?
(a) 40 – 12 + 7 (b) 40+(-12)+7 (c) $|40| + |-12| + |7|$ (d) $|40| - |-12| + |7|$

Question 6) Preeti had mixed fruit juice in a jar that had a temperature of 10^0C. She poured it into 6 glasses and froze the juice to -2^0C. What is the change in temperature of the juice?
(a) -4^0C (b) -12^0C (c) 4^0C (d) 12^0C

Question 7) Which of the following products is different?
(a) (-8)×2×5×(-4) (b) (-8)×(-2)×(-5)×4 (c) 8×(-2)×5×(-4) (d) 8×(-2)×(-5)×4

Question 8) Every week your earn Rs.100, but every other week you spend Rs.25. What is the total amount of money You have after 8 weeks?
(a) Rs.300 (b) Rs.600 (c) Rs.550 (d) Rs.700

Question 9) The value of 6÷(-1) does not lie between
(a) 0 and -10 (b) -3 and -12 (c) -4 and 10 (d) -7 and 7

Question 10) Which of the following is incorrect?
(a) 24÷(-6)>(-25)÷5 (b) 0÷(-8)+11=0÷(100)+11 (c) 8÷(-4)-1>8÷4-1 (d) (-100)÷25÷(-1)=100÷(-25)÷(-1)

Question 11) Which of the following on simplification is negative?
(a) -10-(-6)+4 (b) [3+(-15)]÷4 (c) -16÷[4×(-2)] (d) (2-8)÷(-2)×3

Question 12) The next number in the pattern -48, -33, -18 _____ is
(a) 15 (b) 3 (c) -3 (d) 0

Question 13) -48×116 is not the same as
(a) -48×(100+16) (b) (-48)×100+(-48)×16 (c) (-40-8)×116 (d) -48×16+100

Question 14) Which of the following is the odd one out?
(a) 40+(-45) (b) (-57)-(-52) (c) (-5)×(-1) (d) 80÷(-16)

Question 15) The product of the two integers with the same sign is
(a) positive (b) negative (c) none of these (d) 1

Question 16) Integers are closed under addition and subtraction as the sum and difference of integers is an integer
(a) Identity property (b) Closure Property (c) Additive Inverse (d) None of these

Question 17) The value of (-4) × (-2) × 8 is
(a) 64 (b) 20 (c) – 64 (d) None of these

Question 18) The temperature drops 2^0C every hour for 6 hours. What is the change in temperature?
(a) -12^0C (b) 0^0C (c) 12^0C (d) None of these

Question 19) If 36 ÷ a = - 9 then the value of 'a' is
(a) 4 (b) -4 (c) 0 (d) 2

Question 20) By how much does 2 exceed – 3 ?
(a) -1 (b) 1 (c) -5 (d) 5

Question 21) On subtracting -13 from – 8 we get.
(a) -21 (b) 21 (c) 5 (d) -5

Question 22) Which of the following statement is true?
(a) - 11 > - 8 (b) – 11 < - 8 (c) – 11 and - 8 cannot compared (d) None of these

Question 23) The additive inverse of – 6 is
(a) $\frac{1}{6}$ (b) $\frac{-1}{6}$ (c) 6 (d) 5

Question 24) (-37) × (-7) + (-37) × (-3) = ?
(a) 370 (b) – 370 (c) 148 (d) – 148

Question 25) (?) ÷ (- 18) = - 5
(a) – 90 (b) 90 (c) 0 (d) None of these

Chapter - 2

Question 1) Find the missing numerator, if $2\frac{x}{6} + 4\frac{5}{12} = 6\frac{7}{12}$
(a) 5 (b) 2 (c) 1 (d) 4

Question 2) Mohit needs to work 45 hours per week. He has worked $38\frac{7}{9}$ hours so far this week. How many hours does He need to work on Friday to meet the 45 hours requirement?
(a) 7 hours (b) $6\frac{2}{9}$ hours (c) $6\frac{1}{9}$ hours (d) $6\frac{7}{9}$ hours

Question 3) The product of two mixed numbers is always.
(a) less than 1 (b) equal to 1 (c) greater than 1 (d) None of these

Question 4) Rita packed 6kg of shelled peas into- freezer bags. If each bag weights $\frac{3}{4}$ kg, how many freezer bags Did she pack ?

(a) $4\frac{1}{2}$ (b) 8 (c) 12 (d) $7\frac{1}{2}$

Question 5) A fraction whose numerator and denominator are either or both fractions is called a.

(a) Reciprocal (b) Complex (c) Division (d) None

Question 6) Fractions having the same denominator but different numerators are called

(a) Like fraction (b) Unlike fraction (c) Simple fraction (d) Mixed fraction

Question 7) Decimals having different number of decimal places are called

(a) Like decimals (b) Unlike decimals (c) None of these (d) Only decimals

Question 8) $\left[3\frac{1}{4}\div\left\{1\frac{1}{4}-\frac{1}{2}\left(2\frac{1}{2}-\overline{\frac{1}{4}-\frac{1}{6}}\right)\right\}\right]\div\left(\frac{1}{2}of\,4\frac{1}{3}\right)$ equals.

(a) 18 (b) 36 (c) 39 (d) 78

Question 9) If 213 × 16 = 3408 then 1.6 × 2.13 equals

(a) 0.3408 (b) 34.08 (c) 3.408 (d) 340.8

Question 10) 0.05 × 5 – 0.005 × 5 equals

(a) 2.250 (b) 0.225 (c) 0.0225 (d) 0.275

Question 11) What is the value of the expression on 2.5 + 3.8 ÷ 0.02 ?

(a) 192.5 (b) 315 (c) 6.32 (d) 128.8

Question 12) Lata earns Rs. 125.84 an hour. If she earned Rs.4530.24 last week, how many hours did she work ?

(a) 36 hours (b) 45 hours (c) 20 hours (d) 40 hours

Question 13) Quotient 0.625 is called a

(a) Non terminating decimal (b) terminating decimal (c) None of these (d) repeating decimal

Question 14) Reciprocal of any fraction $\frac{a}{b}$ is

(a) $\frac{b}{a}$ (b) $\frac{a}{b}$ (c) None (d) 0

Question 15) When 0.232323 ..... is converted into a fraction, then the result is

(a) $\frac{1}{5}$ (b) $\frac{2}{9}$ (c) $\frac{23}{99}$ (d) $\frac{23}{100}$

Question 16) Which of those is equal to 3.14×10^6 ?

(a) 314 (b) 3140 (c) 3140000 (d) None of these

Question 17) A maths book is 3.75 cm thick. What is the total thickness of 25 such maths book in meter?

(a) 25.75 cm (b) 0.2875 m (c) 93.75 m (d) 0.9375 m

Question 18) $\frac{0.23-0.023}{0.0023\div23}$ equals

(a) 0.207 (b) 207 (c) 2070 (d) 0.0207

Question 19) By which decimal number should 0.0001 be divided to get 0.01 ?

(a) 0.1 (b) 0.01 (c) 0.001 (d) none of these

Question 20) When $0.\overline{47}$ is converted into a fraction, then the result is

(a) $\frac{46}{90}$ (b) $\frac{46}{99}$ (c) $\frac{47}{90}$ (d) $\frac{47}{99}$

Question 21) The value of $\frac{3.6\times0.48\times2.50}{0.12\times0.09\times0.5}$ is

(a) 80 (b) 800 (c) 8000 (d) 80000

Question 22) 1.1×0.1×0.01 = ?

(a) 0.11 (b) 0.011 (c) 0.0011 (d) none of these

Question 23) 4.669 ÷ 2.3 = ?

(a) 2.3 (b) 2.03 (c) 2.003 (d) none of these

Question 24) Which one of the following is correct statement ?

(a) $\frac{2}{3}<\frac{3}{5}<\frac{14}{15}$ (b) $\frac{3}{5}<\frac{2}{3}<\frac{14}{15}$ (c) $\frac{14}{15}<\frac{3}{5}<\frac{2}{3}$ (d) none of these

Question 25) $36\div\frac{1}{4}$ = ?

(a) 9 (b) $\frac{1}{9}$ (c) $\frac{1}{144}$ (d) 144

Chapter – 3

Question 1) A number that can be written as $\frac{a}{b}$, where 'a' and 'b' are integers and b = ≠ 0 is called

(a) Natural number (b) Whole number (c) Rational number (d) None of these

Question 2) A rational number is its positive numerical value is called.

(a) Positive value (b) Negative value (c) Absolute value (d) None of these

Question 3) A rational number is said to be in _____ form when it is in its simplest form and its denominator is positive.

(a) Standard (b) Rational (c) None of these (d) Lowest

Question 4) Write in order from least to greatest (ascending order) $\frac{-5}{6}$, $\frac{7}{-18}$, $\frac{-19}{24}$, $\frac{37}{-72}$ the correct form is –

(a) $\frac{7}{-18}$, $\frac{-5}{6}$, $\frac{-19}{24}$, $\frac{37}{-72}$ (b) $\frac{-5}{6}$, $\frac{-19}{24}$, $\frac{-37}{72}$, $\frac{-7}{18}$ (c) $\frac{-19}{24}$, $\frac{7}{-18}$, $\frac{37}{72}$, $\frac{-5}{6}$ (d) $\frac{-7}{18}$, $\frac{-19}{24}$, $\frac{-5}{6}$, $\frac{-37}{72}$

Question 5) Add $\left(-1\frac{5}{12}\right)+2\frac{1}{16}$

(a) $\frac{31}{48}$ (b) $\frac{14}{48}$ (c) $\frac{-31}{48}$ (d) $\frac{-15}{48}$

Question 6) Two rational numbers, can be compared by finding their.

(a) Difference method (b) product method (c) cross product (d) none of these

Question 7) If $\frac{a}{b}$ and $\frac{c}{d}$ are two rational numbers (b and d ≠ 0) then

(a) $\frac{a}{b} - \frac{c}{d} = \frac{a}{b} + \left(\frac{-c}{d}\right)$ (b) $\frac{b}{a} - \frac{d}{c} = \frac{b}{a} + \left(\frac{d}{c}\right)$

(c) $\frac{a}{b} + \frac{c}{d} = \frac{a}{b} + \frac{d}{c}$ (d) $\frac{b}{a} + \frac{c}{d} = \frac{a}{b} + \left(\frac{-d}{c}\right)$

Question 8) Which set of numbers is in order from greatest to least ?

(a) 0.3, $\frac{-1}{4}$, $\frac{-4}{5}$, 0 (b) $\frac{-1}{4}$, $\frac{-4}{5}$, 0 , 0.3

(c) 0.3, 0, $\frac{-4}{5}$, $\frac{-1}{4}$ (d) 0.3, 0, $\frac{-1}{4}$, $\frac{-4}{5}$

Question 9) The product of two numbers is $-24\frac{1}{2}$. If one of the numbers is $5\frac{1}{4}$, then the other number is :

(a) $5\frac{1}{6}$ (b) $-4\frac{2}{3}$ (c) $-5\frac{1}{6}$ (d) $4\frac{2}{3}$

Question 10) Divide $\frac{9}{-14} \div 6$

(a) $\frac{5}{6}$ (b) $\frac{-3}{28}$ (c) $\frac{3}{28}$ (d) Not define

Question 11) Solve the equation : $|x| = 21 \div 3\frac{1}{2}$ then

(a) 6 (b) 7 (c) – 6, 6 (d) – 6

Question 12) Solve $\frac{-8}{-13} + \frac{-9}{26} + \frac{30}{-39} + 1$ the answer is :

(a) $1\frac{41}{78}$ (b) $\frac{57}{78}$ (c) $\frac{1}{2}$ (d) 0

Question 13) If $3\frac{1}{6} + x = \frac{19}{42}$, the value of x is

(a) $2\frac{10}{14}$ (b) $-2\frac{5}{7}$ (c) $-3\frac{13}{21}$ (d) $-2\frac{3}{14}$

Question 14) A pile of paper is 10 $\frac{1}{2}$ cm high and each sheet is $\frac{7}{100}$ cm thick. Find the number of sheets in the pile

(a) 100 (b) 1000 (c) 700 (d) 150

Question 15) The reciprocal of $\left|2\frac{1}{6} - 3\frac{5}{12}\right|$ is

(a) $1\frac{1}{4}$ (b) $\frac{-4}{5}$ (c) $\frac{4}{5}$ (d) none of these

Question 16) By what number should we multiply $-4\frac{9}{14}$ so that the product is $4\frac{8}{63}$?

(a) $\frac{-8}{9}$ (b) $\frac{4}{9}$ (c) $\frac{7}{9}$ (d) $\frac{8}{9}$

Question 17) Evaluate $\frac{3\frac{3}{4}}{-x}$ for $x = 8\frac{3}{4}$

(a) $2\frac{1}{3}$ (b) $\frac{3}{7}$ (c) $\frac{-3}{7}$ (d) $\frac{5}{7}$

Question 18) What must be added to $\frac{-5}{9}$ to make it equal to $\frac{2}{3} + \frac{2}{5}$?

(a) $\frac{23}{45}$ (b) $1\frac{28}{45}$ (c) $\frac{1}{45}$ (d) $\frac{-23}{45}$

Question 19) To divide by any non zero number, multiply by its :

(a) reciprocal (b) whole number (c) Itself (d) None of these

Question 20) Solve $-1.25 \times -0.44 \times \frac{10}{-11}$ the value is

(a) $\frac{-1}{2}$ (b) $\frac{1}{2}$ (c) 0 (d) 1

Question 21) The reciprocal of a rational number is also called its

(a) Additive inverse (b) Multiplicative inverse (c) None of these (d) both (a) and (b)

Question 22) The number terminates i.e which comes to an end is called

(a) non terminating (b) terminating (c) both (a) and (b) (d) none

Question 23) All _____ decimals are rational numbers

(a) Repeating (b) On reccuring (c) terminating (d) None of these

Question 24) The absolute value of $|7|$ is

(a) – 7 (b) 7 (c) None (d) 0

Question 25) The reciprocal of - 23 is

(a) 23 (b) $\frac{1}{-23}$ (c) 1 (d) None of these

Chapter – 4

Question 1) A negative rational number raised to an even power is $(-)^{even}$

(a) positive (b) negative (c) 0 (d) None of these

Question 2) The value of $(-1)^{101}$ is

(a) 1 (b) -1 (c) 0 (d) None of these

Question 3) Find the value of $\frac{81}{625}$ in power notation.

(a) $\left(\frac{3}{5}\right)^4$ (b) $\left(\frac{9}{25}\right)^4$ (c) both (a) & (b) (d) None of these

Question 4) If $a^m \times a^n$ = ?

(a) $(a)^{mn}$ (b) $(a)^{m-n}$ (c) $(a)^{m+n}$ (d) a

Question 5) Determine 'a' so that $\left(\frac{2}{5}\right)^3 \times \left(\frac{2}{5}\right)^{a+5} = \left(\frac{2}{5}\right)^{18}$

(a) 10 (b) 2 (c) 4 (d) 0

Question 6) $(6^{-1} - 8^{-1})^{-1}$ = ?

(a) $\frac{-1}{2}$ (b) - 2 (c) $\frac{1}{24}$ (d) 24

Question 7) $(5^{-1} \times 3^{-1})^{-1}$ = ?

(a) $\frac{1}{15}$ (b) $\frac{-1}{15}$ (c) 15 (d) – 15

Question 8) $\left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{3}\right)^{-2} + \left(\frac{1}{4}\right)^{-2}$ = ?

(a) $\frac{61}{144}$ (b) 29 (c) $\frac{144}{61}$ (d) none of these

Question 9) $\left\{6^{-1} + \left(\frac{3}{2}\right)^{-1}\right\}^{-1}$ = ?

(a) $\frac{2}{3}$ (b) $\frac{5}{6}$ (c) $\frac{6}{5}$ (d) none of these

Question 10) $\left(\frac{-1}{2}\right)^{6}$ = ?

(a) - 64 (b) 64 (c) $\frac{1}{64}$ (d) $\frac{-1}{64}$

Question 11) Evaluate $x^2 - 100\,(x-1)^2$, if x = 2.2

(a) 0.84 (b) -139.16 (c) 436.16 (d) 84

Question 12) Find $\left(\frac{a}{b}\right)^{-3}$ if $\frac{a}{b} = \left(\frac{2}{3}\right)^{-2} \div \left[\left(\frac{-2}{3}\right)^{6}\right]^{0}$

(a) $\frac{-32}{243}$ (b) $\frac{64}{729}$ (c) $\frac{3}{2}$ (d) $\frac{243}{32}$

Question 13) Find 'x' so that

$\left[\left\{\left(\frac{4}{57}\right)^{8}\right\}^{3}\right]^{-2} = \left(\frac{4}{57}\right)^{-5x-3}$

(a) 3 (b) -3 (c) 9 (d) -9

Question 14) $(3^2 - 2^2) \times \left(\frac{2}{3}\right)^{-3}$ = ?

(a) $\frac{45}{8}$ (b) $\frac{8}{45}$ (c) $\frac{8}{135}$ (d) $\frac{135}{8}$

Question 15) $\left[\left(\frac{1}{3}\right)^{-3} - \left(\frac{1}{2}\right)^{-3}\right] \div \left(\frac{1}{4}\right)^{-3}$ = ?

(a) $\frac{19}{64}$ (b) $\frac{64}{19}$ (c) $\frac{27}{16}$ (d) none of these

Question 16) $\left(\frac{-9}{11}\right)^{0}$ is equal to

(a) 0 (b) 1 (c) 2 (d) 3

Question 17) If $x = \left(\frac{5}{8}\right)^{-2} \times \left(\frac{12}{15}\right)^{-2}$, then the value of x^{-3} is

(a) $\frac{1}{8}$ (b) 64 (c) 8 (d) $\frac{1}{64}$

Question 18) $\left(\frac{2}{3}\right)^{-5}$ = ?

(a) $\frac{32}{243}$ (b) $\frac{243}{32}$ (c) $\frac{-32}{243}$ (d) $\frac{-243}{32}$

Question 19) $\left\{\left(\frac{1}{3}\right)^{2}\right\}^{4}$ = ?

(a) $\left(\frac{1}{3}\right)^{6}$ (b) $\left(\frac{1}{3}\right)^{8}$ (c) $\left(\frac{1}{3}\right)^{16}$ (d) $\left(\frac{1}{3}\right)^{24}$

Question 20) $\left(\frac{-2}{5}\right)^{7} \div \left(\frac{-2}{5}\right)^{5}$ = ?

(a) $\frac{4}{25}$ (b) $\frac{-4}{25}$ (c) $\left(\frac{-2}{5}\right)^{12}$ (d) $\frac{25}{4}$

Question 21) $\left(\frac{5}{3}\right)^{-5} \times \left(\frac{5}{3}\right)^{11} = \left(\frac{5}{3}\right)^{8x}$ the x = ?

(a) $\frac{-1}{2}$ (b) $\frac{-3}{4}$ (c) $\frac{3}{4}$ (d) $\frac{4}{3}$

Question 22) Solve for x : $(2^x)^6 = [\,(2)^9\,]^2$

(a) 9 (b) -9 (c) -6 (d) 3

Question 23) If $\left(\frac{8}{3}\right)^{-5} \times \left(\frac{16}{21}\right)^{5} = \left(\frac{2}{7}\right)^{x}$ then x^3 is

(a) 125 (b) -125 (c) -1 (d) -15

Question 24) By what number should $(-8)^{-1}$ be multiplied to get 10^{-1} ?

(a) $\frac{4}{5}$ (b) $\frac{-5}{4}$ (c) $\frac{-4}{5}$ (d) none of these

Question 25) Which of the following numbers is in standard form?

(a) 21.56×10^5 (b) 215.6×10^4 (c) 2.156×10^6 (d) none of these

Chapter – 5

Question 1) When a number is multiplied by itself the product so obtained is called
(a) cube (b) square (c) square root (d) cube root

Question 2) A natural number which is square of another natural number is called.
(a) perfect square (b) perfect cube (c) None of these (d) both (a) and (b)

Question 3) The $\sqrt{\ }$ (symbol) represent
(a) cube (b) fourth root (c) square root (d) All these

Question 4) The cube of a number is that number raised to the power
(a) 2 (b) 4 (c) 3 (d) 0

Question 5) Which of the following numbers is not a perfect square?
(a) 7056 (b) 3969 (c) 5478 (d) 4624

Question 6) Which of the following number is not a perfect square
(a) 1843 (b) 3721 (c) 1024 (d) 1296

Question 7) Which of the following cannot be the unit digit of a perfect square number?
(a) 6 (b) 1 (c) 9 (d) 8

Question 8) What least number must be subtracted from 176 to make it a perfect square?
(a) 16 (b) 10 (c) 7 (d) 4

Question 9) What least number must be added to 526 to make it a perfect square?
(a) 3 (b) 2 (c) 1 (d) 6

Question 10) $\sqrt{0.9}$ = ?
(a) 0.3 (b) 0.03 (c) 0.33 (d) 0.94

Question 11) $\sqrt{0.9} \times \sqrt{1.6}$ = ?
(a) 0.12 (b) 1.2 (c) 0.75 (d) 12

Question 12) $\frac{\sqrt{288}}{\sqrt{128}}$ = ?

(a) $\frac{\sqrt{3}}{2}$ (b) $\frac{3}{\sqrt{2}}$ (c) $\frac{3}{2}$ (d) 1.49

Question 13) $\sqrt{2\frac{1}{4}}$ = ?
(a) $2\frac{1}{2}$ (b) $1\frac{1}{2}$ (c) $1\frac{1}{4}$ (d) none of these

Question 14) Which of the following is the square of an even number ?
(a) 196 (b) 441 (c) 625 (d) 529

Question 15) Which of the following is the square of an odd number ?
(a) 2116 (b) 3844 (c) 1369 (d) 2500

Question 16) $\sqrt{72} \times \sqrt{98}$ = ?
(a) 42 (b) 84 (c) 64 (d) 74

Question 17) $\sqrt[3]{512}$ = ?
(a) 6 (b) 7 (c) 8 (d) 9

Question 18) $\sqrt[3]{125 \times 64}$ = ?
(a) 100 (b) 40 (c) 20 (d) 30

Question 19) $\sqrt[3]{\frac{-512}{729}}$ = ?

(a) $\frac{-7}{9}$ (b) $\frac{-8}{9}$ (c) $\frac{7}{9}$ (d) $\frac{8}{9}$

Question 20) $(0.8)^3$ = ?
(a) 51.2 (b) 5.12 (c) 0.512 (d) none of these

Question 21) $\left(1\frac{3}{10}\right)^3$ = ?

(a) $1\frac{27}{1000}$ (b) $2\frac{27}{1000}$ (c) $2\frac{197}{1000}$ (d) none of these

Question 22) By what least number should 648 be multiplied to get a perfect cube?
(a) 3 (b) 6 (c) 9 (d) 8

Question 23) Which of the following numbers is a perfect cube ?
(a) 1152 (b) 1331 (c) 2016 (d) 739

Question 24) By what least number should 1536 be divided to get a perfect cube ?
(a) 3 (b) 4 (c) 6 (d) 8

Question 25) Which of the following is a cube of an odd number ?
(a) 216 (b) 512 (c) 343 (d) 1000

Chapter – 11

Question 1) A symbol in algebra having a fixed value is called.
(a) Constant (b) Algebric expression (c) variable (d) none of these

Question 2) A symbol which can be given or assigned a varied number of numerical values is called
(a) Term (b) Variable (c) Constant (d) Coefficients

Question 3) A combination of constants and variables connected by the basic mathematical operators i.e +, -, ×, ÷ Is called
(a) Algebric expression (b) Like terms (c) Unlike terms (d) Term

Question 4) In a polynomial the exponents of the variables are always
(a) integers (b) positive integers (c) non- positive integers (d) none of these

Question 5) Which of the following is a binomial?
(a) $8 \times x \div x$ (b) $12a^2 + 7b + 5c$ (c) $5a \times 7b \times 8c$ (d) $12(a^3+a)$

Question 6) The various parts of an algebric expression connected by + or – sign are called
(a) Expression (b) Constants (c) Term (d) None of these

Question 7) Multiply 3x by (2x + 5y)
(a) $6x^2 + 15xy$ (b) $6x^3 + 15xy^2$ (c) $6x + 15x^2y^2$ (d) none of these

Question 8) Subtract 6a – 4b from 5a + 8b we get
(a) –a + 12b (b) –a -12b (c) a + 12b (d) none of these

Question 9) The sum of a+b+ab, -b+c-bc and –c-a+ac is
(a) 2c + ab – bc + ac (b) ab – bc – ac (c) ab – bc + ac (d) 2a + 2b – 2c + ab – ac – bc

Question 10) Rule (+ x) × (- y) becomes.
(a) + xy (b) – xy (c) xy (d) none of these

Question 11) Terms having same literal factors are called
(a) Coefficient (b) like terms (c) constantant (d) none of these

Question 12) 5a – 3 [3a – (4 – 7a) } + 4 (a-3) on simplification is equal to
(a) -21 a (b) 21a + 12 (c) -21a – 24 (d) -24

Question 13) (3x - 4) ($2x^2$-5x+1) – (2x - 1) ($3x^2$ + 7x - 5) equals.
(a) $12x^3 – 40x^2 + 34x – 1$ (b) $34x^2 – 40x – 9$ (c) $– 34x^2 + 40x – 9$ (d) $12x^3 – 34x^2 + 40x + 9$

Question 14) Divide $-54x^4y^3z$ by $6x^2y^2z$
(a) $9xy^2$ (b) $– 9x^2y$ (c) $9x^2y^2$ (d) $– 9x^2y^2$

Question 15) Simplify (a+1) (a+2) (a+3) then
(a) $a^3+6a^2+11a+6$ (b) $a^2+6a^3-11a+8$ (c) $a^4+6a^2-11a-6$ (d) None of these

Question 16) Which polynomial has the highest degree?
(a) $5x^2–2x^8+x^6$ (b) $-7x^2+20$ (c) $27x^{10}+3x^5-16$ (d) $-150x^3$

Question 17) By how much is $a^4-6a^2b^2+b^4$ more than $a^4+4a^2b^2+b^4$?
(a) $-2a^2b^2$ (b) $2a^4+b^4$ (c) $-10a^2b^2$ (d) $2a^2b^2$

Question 18) What will be the missing term?
$(-14y^2+9y^2-12y+3) + (2y^2+ \square -6y-2) = (-3y^2-15y+1)$
(a) -6y (b) 3y (c) –3y (d) 6y

Question 19) $\frac{-7x^7y^3}{X^7}$ $\frac{-56xy^5z^2}{-8xy^2z^2}$ equals
(a) $-15y^3$ (b) $15y^3$ (c) y^3 (d) 0

Question 20) The sum or difference of monomials is called
(a) polynomial (b) Term (c) Coefficient (d) None

Question 21) The term having different variable parts are called
(a) Constant and variables (b) Terms (c) Like terms (d) Unlike terms

Question 22) The sum of the exponents of the variables is :
(a) Degree (b) exponents (c) variables (d) None

Question 23) x^0+y^0+3 equals
(a) 1 (b) 2 (c) 3 (d) 5

Question 24) Which is the correct one
(a) Dividend = Reminder × Q + Div (b) Divisor = Dividend × Q + R
(c) Dividend = Q × D + R (d) None of these

Question 25) When $2x^2-11x+12$ divided by x-4 then reminder is
(a) 1 (b) 2 (c) 0 (d) 4

Chapter – 12

Question 1) A mathematical statement that two expressions are equal called
(a) Statement (b) equation (c) expression (d) none of these

Question 2) If $5x\frac{-3}{4} = 2x\frac{-2}{3}$, then x = ?
(a) $\frac{1}{12}$ (b) $\frac{1}{4}$ (c) 36 (d) $\frac{1}{36}$

Question 3) If (2n+5) = 3 (3n - 10), then n = ?
(a) 5 (b) 3 (c) $\frac{2}{5}$ (d) $\frac{2}{3}$

Question 4) If $\frac{x-1}{x+1} = \frac{7}{9}$ then x = ?
(a) 6 (b) 7 (c) 8 (d) 10

Question 5) The sum of two consecutive whole numbers is 53. The smaller number is
(a) 25 (b) 26 (c) 29 (d) 23

Question 6) A number when multiplied by 5 is increased by 80. The number is
(a) 15 (b) 20 (c) 25 (d) 30

Question 7) An value of the variable which makes the equation a true statement is called
(a) expression (b) solution (c) variable (d) None

Question 8) Transposing a term means changing its sign and taking it to other side of :
(a) statement (b) constant (c) Equation (d) None

Question 9) If 8(2x-5)-6(3x-7)=1, then x=?
(a) 2 (b) 3 (c) $\frac{1}{2}$ (d) $\frac{1}{3}$

Question 10) If $\frac{x}{2}$ - 1 = $\frac{x}{3}$ + 4 then x = ?
(a) 8 (b) 16 (c) 24 (d) 30

Question 11) $\frac{2}{3}$ of a number is less than the original number by 10. The original number is.
(a) 30 (b) 36 (c) 45 (d) 60

Question 12) Thrice a number when increased by 6 gives 24. The number is
(a) 6 (b) 7 (c) 8 (d) 11

Question 13) The sum of two consecutive odd number is 36. The smaller one is
(a) 15 (b) 17 (c) 19 (d) 13

Question 14) The ages of A and B are in the ratio 5:3, After 6 years, their ages will be in the ratio 7:5. The present Age of A is
(a) 5 years (b) 10 years (c) 15 years (d) 20 years

Question 15) The length of a rectangle is three times its width and its perimeter is 96m. The length is.
(a) 12m (b) 24m (c) 36m (d) 48m

Question 16) On adding 9 to the twice of a whole number gives 31. The whole number is.
(a) 21 (b) 16 (c) 17 (d) 11

Question 17) If $\frac{2x-1}{3}$ = $\frac{x-2}{3}$ + 1 then x = ?
(a) 2 (b) 4 (c) 6 (d) 8

Question 18) The sum of two consecutive even numbers is 86. The larger of the two is
(a) 46 (b) 36 (c) 38 (d) 44

Question 19) Two complementary angles differ by 10^0. The larger angle is.
(a) 60^0 (b) 50^0 (c) 64^0 (d) 54^0

Question 20) Solve 5x – 6 = 4x – 2 then x = ?
(a) 2 (b) 3 (c) 4 (d) 0

Question 21) An equation involving only a linear polynomial is called.
(a) linear equation (b) quadratic equation (c) polynomial (d) none of these

Question 22) When any term of an equation may be taken from one side to the other with a change its.
(a) value (b) sign (c) statement (d) none of these

Question 23) If 7x – 2 = 21 + 10x then x is
(a) fraction (b) an integer (c) rational number (d) none of these

Question 24) The value of x in $\frac{2x-3}{4}$ - $\frac{3x-5}{2}$ = x + $\frac{3}{4}$ is
(a) $\frac{-1}{3}$ (b) 1 (c) $\frac{1}{4}$ (d) $\frac{1}{2}$

Question 25) If $\frac{4m-3}{7}$ = 3 what is the value of 7m – 5 ?
(a) 6 (b) 10.5 (c) 37 (d) 68.5

Chapter – 13

Question 1) If a is greater than b which is correct
(a) a < b (b) a > b (c) a = b (d) a ≠ b

Question 2) A number satisfies an inequality, if it makes that inequality
(a) False (b) Incorrect (c) True (d) none of these

Question 3) On multiplying both sides by the same negative number it becomes.
(a) Changed (b) reversed (c) Un changes (d) None of these

Question 4) The set of elements from which the replacement of the _____ is taken is called replacement Set.
(a) Variables (b) Constants (c) operators (d) numbers

Question 5) We should not _____ both sides of an inequality by a negative number unless it is desired to reverse the inequality.
(a) multiply (b) divide (c) multiply or divide (d) none of these

Question 6) The set of all possible values of 'x' which satisfy a given in equation is called
(a) solution set (b) replacement set (c) reverse set (d) none of these

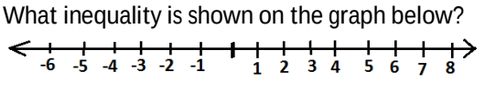
Question 7) If 3x + 2 ≥ 14 then x is
(a) x < 4 (b) x > 4 (c) x ≥ 4 (d) none of these

Question 8) On changing sides the _____ of the inequality is
(a) reverse (b) changed (c) unchange (d) none of these

Question 9) Solve 3x + 7 < 10 the x is
(a) x < 1 (b) x ≤ 1 (c) x ≥ 2 (d) none of these

Question 10) Solve x + 3 > 8 where x £ w then
(a) x = 1,2,3 (b) x = 6,7,8..... (c) x = 0 (d) none of these

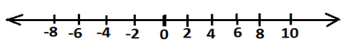
Question 11) What inequality is shown on the graph below?

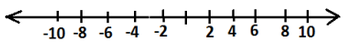


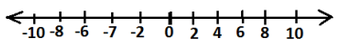
(a) 2x > 6 (b) 2x > - 6 (c) 2x ≥ 6 (d) 2x ≥ - 6

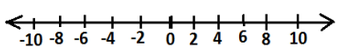
Question 12) Which is the solution to 4x – 6 < 10 ?
(a) x > 1 (b) x < 1 (c) x > 4 (d) x < 4

Question 13) Which is the solution to 5 + 2x > 7 ?

(a) 

(b) 

(c) 

(d) 

Question 14) Which is the solution to $\frac{x}{3} - \frac{1}{6} > \frac{5}{6}$?

(a) x > 1 (b) x > 2 (c) x > 3 (d) x > 6

Question 15) Which inequality is true

(a) 4 (6)>26 (b) 6+11<14 (c) 10-6<5 (d) 6+(-1)>5

Question 16) Solve a + 3 ≥ 2

(a) a ≤ - 1 (b) a ≥ - 1 (c) a ≥ 1 (d) a ≥ 5

Question17) Solve a – 6 ≥ - 1

(a) a ≤ 5 (b) a ≥ - 5 (c) a ≤ - 5 (d) a ≥ 5

Question 18) Which is the solution to $-3 \leq \frac{x}{3}$?

(a) x ≤ - 9 (b) x ≥ - 9 (c) x ≤ - 1 (d) x ≥ - 1

Question 19) Solve – 8x > 48

(a) x > - 6 (b) x < - 6 (c) x < 6 (d) x > 8

Question 20) Which is the solution to $\frac{a}{2} + \frac{2}{5} \leq \frac{9}{10}$?

(a) a ≤ 1 (b) a ≤ 2 (c) a ≤ 5 (d) a ≤ 10

Question 21) Which inequality is true?

(a) 5 (-2) > 10 (b) 11 + (-3) < 9 (c) 3 (13) < 39 (d) 5 + 12 > 18

Question 22) Solve – 1 < a – 3

(a) a > - 4 (b) a > - 2 (c) a > $\frac{1}{3}$ (d) a > 2

Question 23) Solve a – 6 ≥ - 6

(a) a ≤ - 12 (b) a ≥ - 6 (c) a ≥ 0 (d) a ≥ 1

Question 24) Which is the solution to $-2 \leq \frac{-2x}{3}$

(a) x ≥ - 3 (b) x ≤ - 3 (c) x ≥ - 9 (d) x ≤ - 9

Question 25) Solve – 10x < - 100

(a) x > 10 (b) x < 10 (c) x > -10 (d) – x > - 10

Chapter – 14

Question 1) A _____ indicates an exact location in space

(a) point (b) line (c) Angle (d) None of these

Question 2) A straight path that extends endlessly in both directions.

(a) plane (b) point (c) line (d) Ray

Question 3) A _____ is a flat surface which extends indefinitely in all directions.

(a) Line (b) point (c) plane (d) None of these

Question 4) A portion of a line having a definite length.

(a) Point (b) line segment (c) Line (d) None of these

Question 5) The part of a line that extends indefinitely in one direction from a given point is called

(a) Ray (b) Line (c) Line segment (d) None of these

Question 6) An angle is 40^0 less than three times its supplement.

(a) 125^0 and 55^0 (b) 45^0 and 135^0 (c) 110^0 and 70^0 (d) 120^0 and 60^0

Question 7) Find the complement of 58^0

(a) 32^0 (b) 48^0 (c) 60^0 (d) 20^0

Question 8) Two complementary angles are in the ratio 4:5. Find the angles.

(a) 40 and 50^0 (b) 60^0 and 30^0 (c) 45^0 and 45^0 (d) none of these

Question 9) Three or more points which lie on the same line are called

(a) Ray (b) line (c) collinear (d) none of these

Question 10) Three or more lines in a plane, if all of them pass through the same point are called.

(a) Point (b) Concurrent (c) Collinear (d) None of these

Question 11) The sum of the angles round a point is

(a) 180^0 (b) 360^0 (c) 540^0 (d) 720^0

Question 12) An inclination between two rays with the same initial point is called

(a) Angle (b) Arm (c) Ray (d) None of these

Question 13) Vertically opposite angles are always.

(a) different (b) equal (c) both a and b (d) None of these

Question 14) The sum of the angles at a point on one side of a straight line is

(a) 180^0 (b) 540^0 (c) 360^0 (d) 0^0

Question 15) Find the supplement of 124^0

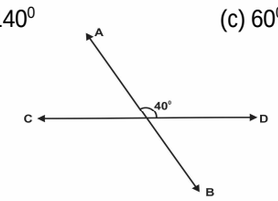
(a) 56^0 (b) 36^0 (c) 26^0 (d) 46^0

Question 16) An angle whose magnitude is more than 0^0 but less than 90^0 is called.

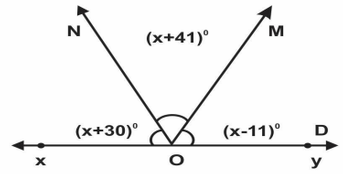
(a) acute (b) obtuse (c) Straight (d) None of these

Question 17) In the given figure lines AB and CD intersect at 0. If ∠ A0D = 40^0, find∠B0C

(a) 40^0 (b) 140^0 (c) 60^0 (d) None of these



Question 18) In the given figure, find x



(a) 60^0 (b) 40^0
(c) 70^0 (d) 30^0

Question 19) Find the complement of $35^0 32^l$
(a) $54^0 28^l$ (b) $64^0 27^l$ (c) $44^0 28^l$ (d) $64^0 25^l$

Question 20) 1 complete rotation equals
(a) 720^0 (b) 360^0 (c) 180^0 (d) None of these

Question 21) An angle whose magnitude lies between 180^0 and 360^0 is called
(a) reflex (b) complete (c) Acute (d) None of these

Question 22) The angles formed by two intersecting lines having no common arm are called.
(a) vertically opposite (b) Adjacent (c) Straight (d) Supplementary

Question 23) A line that divides an angle into two equal angles is called the
(a) bisector (b) transversal (c) perpendicular (d) None of these

Question 24) If $(4x + 28)^0$ and $(x - 8)^0$ are supplementary angles then find 'x'.
(a) 32^0 (b) 64^0 (c) 96^0 (d) 70^0

Question 25) Adjacent angles whose two non- common arms are opposite rays (lie on the same straight line) called
(a) vertically opposite (b) linear pair (c) Adjacent (d) None of these

Chapter – 15

Question 1) A line that intersects two coplanar lines at two different points are called
(a) parallel lines (b) transversal (c) coplaner (d) None of these

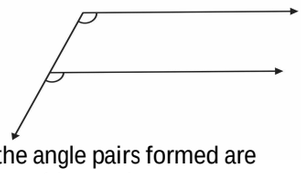
Question 2) Those lines in the same plane that never intersect are called
(a) coplaner (b) parallel (c) transversal (d) straight

Question 3) Angles lie on the same side of the transversal and on the same sides of the lines
(a) Alternate interior (b) Corresponding (c) Co interior (d) None of these

Question 4) The perpendicular distance between two parallel lines remains
(a) Different (b) Constant (c) Changed (d) None of these

Question 5) The angle lie on opposite sides of the transversal, outside the lines
(a) Alternate exterior (b) Alternate interior (c) Adjacent (d) Vertically opposite

Question 6) Name the type of angles which shown in fig

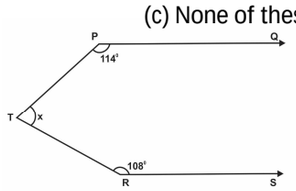


(a) Corresponding (b) Alternate exterior
(c) Adjacent (d) None of these

Question 7) If two parallel lines are cut by a transversal then the angle pairs formed are
(a) equal or supplementary (b) different (c) complementary (d) None of these

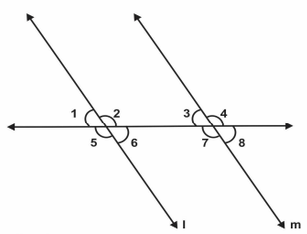
Question 8) The sum of co interior angles are
(a) 90^0 (b) 180^0 (c) None of these (d) 360^0

Question 9) In the figure PQ || RS find x



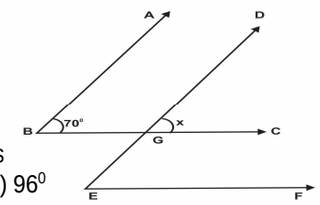
(a) 138^0 (b) 66^0
(c) 70^0 (d) 40^0

Question 10) Line L/1m which of the following pairs of angles are congruent?



(a) ∠ 1 and ∠ 4 (b) ∠ 3 and ∠ 4
(c) ∠ 4 and ∠ 8 (d) ∠ 6 and ∠ 8

Question 11) In the given figure, the arms of two angles are parallel, if ∠ ABC = 70^0 then find x

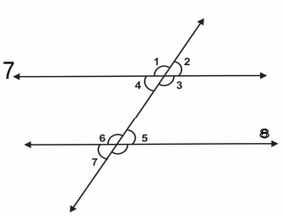


(a) 70^0 (b) 110^0
(c) 30^0 (d) none of these

Question 12) If ∠1=5x-14^0 and ∠3=3x+10^0 are vertically opposite angles then the value of 'x' is
(a) 12^0 (b) 24^0 (c) 48^0 (d) 96^0

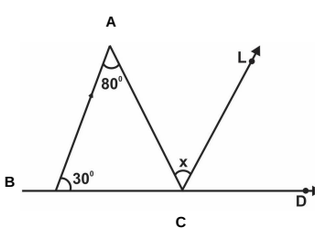
Question 13) Corresponding angles are ?
(a) equal (b) 180^0 (c) different (d) None of these

Question 14) In the given figure which one is alternate interior angles



(a) ∠ 3 and ∠ 6, ∠ 4 and ∠ 5 (b) ∠ 3 and ∠ 6, ∠ 4 and ∠ 7
(c) ∠ 4 and ∠ 5, ∠ 2 and ∠ 6 (d) None of these

Question 15) In the given figure, AB || CL. Find 'x'

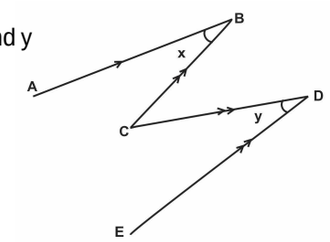


(a) 80^0 (b) 70^0
(c) 30^0 (d) 40^0

Question 16) In the given figure AB || CD and BC || DE. What type of angles are x and y

(a) Corresponding (b) vertically opposite

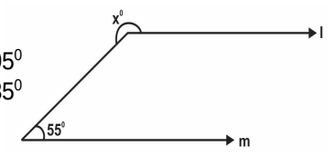
(c) alternate (d) None of these



Question 17) If L || m, then value of 'x' is

(a) 115^0 (b) 295^0

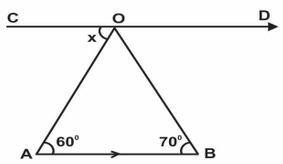
(c) 195^0 (d) 235^0



Question 18) In the given figure find 'x' if AB || CD

(a) 60^0 (b) 70^0

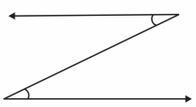
(c) 50^0 (d) None



Question 19) What type of angles are shown in figure

(a) Alternate interior (b) Corresponding

(c) vertically opposite (d) None of these



Question 20) If $\angle A = (5x-10)^0$ and $\angle B = (8x - 5)^0$ are co interior angles the find 'x'

(a) 20^0 (b) 15^0 (c) 25^0 (d) 10^0

Question 21) For two parallel lines and a transversal, $\angle 1 = 85^0$, for which pair of angles measures is sum least ?

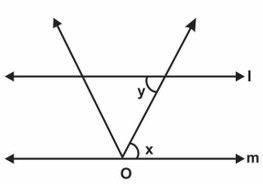
(a) $\angle 1$ and a corresponding angle (b) $\angle 1$ and same side interior angle

(c) $\angle 1$ and its supplement (d) $\angle 1$ and its complement

Question 22) In the given figure, L ‖ m Explain, why $\frac{x}{y}$ = 1 because

(a) Vertically opposite (b) Adjacent

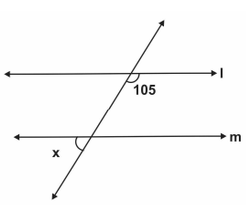
(c) Alternate interior (d) None of these



Question 23) In the given figure, find 'x' if L ‖ m

(a) 75^0 (b) 105^0

(c) 180^0 (d) 135^0



Question 24) The same side interior angles are

(a) equal (b) Complementary (c) Supplementary (d) none of these

Question 25) Alternate interior angles are

(a) equal (b) not equal (c) supplementary (d) none of these