



PT-3 Revision worksheet (2024-25)

NAME: _____

DATE: 6/12/2024

CLASS: VIII Division _____

SUBJECT: MATHS

PREPARED BY: Mr. Prashant Baheti

Q1) Add the following.

(i) $5ab - bc, 4bc - ca, ca - ab$ (ii) $8c^2 + m^2, m^2 + 5n^2, n^2 + c^2, 22cm + 2mn + 2nc$

Q2) Subtract $47xy + 5yz - 7zx$ from $85xy - 2yz - 2zx + 10xyz$

Q3) Subtract $14p^2q - 3pq + 5pq^2 - 8p + 7q - 10$ from $18 - 3p - 11q + 5pq - 2pq^2 + 5p^2q$

Q4) Obtain the product of

(i) $5xy, 8xyz, 4zx$ (ii) $12xy, 41y, 8y^2, 16y^3$

Q5) Multiply the binomials.

(i) $(25x + 54)$ and $(3x - 3)$ (ii) $(7y - 8)$ and $(3y - 4)$

Q6) Simplify each of the following:

(i) $[(42/3)^{-3} \times (-24/5)^6] \div (2/3)^5$ (ii) $(7/4)^5 \div (81)^2 \times (5/3)^3$ (iii) $[\{(-8/3)^2\}^{-2}]^{-1}$

Q7) A machine fills 8400 bottles in 12 hours. How many bottles will it fill in 10 hours?

Q8) If x varies inversely as y and $x = 4$ when $y = 6$, when $x = 3$, then find y.

Q9) which of the following vary directly and which vary inversely with each other

- (i) The time taken by a train to cover a fixed distance and the speed of the train.
- (ii) The distance travelled by CNG bus and the amount of CNG used.
- (iii) The number of people working and the time to complete a given work.
- (iv) Income tax and the income.

Q9) A road roller takes 100 complete revolutions to move once over to level a road. Find the area of the road if the diameter of a road roller is 35 cm and length 50 m

Q10) A milk tank is in the form of cylinder whose radius is 1.4 m and length is 7 m. Find the quantity of milk in liters that can be stored in the tank.

Q11) A square sheet of paper is converted into a cylinder by rolling it along its side. What is the ratio of the base radius to the side of the square?

Q12) Add the following algebraic expressions.

$$5x^3 + 7 + 6x - 5x^2, 2x^2 - 8 - 9x, 4x - 2x^2 + 3x^3, 3x^3 - 9x - x^2 \text{ and } x - x^2 - x^3 - 4$$

Q13) A farmer has enough food to feed 20 animals in his cattle for 6 days. How long would the food last if there were 10 more animals in his cattle?

Q14) A school has 8 periods a day, each of 45 minutes duration. How long would each period be, if the school has 9 periods a day, assuming the number of school hours to be the same?

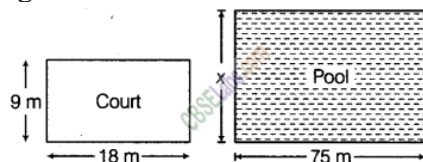
Q15) A machine in a soft drink factory fills 960 bottles in six hours. How many bottles will it fill in five hours?

Q16) Evaluate: (i) $(18^{-1} \times 25^3) / 2^{-4}$ (ii) $(15^{-1} \times 12^{-2}) \times 6^{-1}$

Q17) Express the following numbers in standard form.

(i) 0.00000000000866 (ii) 0.00000000000944 (iii) 6020060000000000

Q18) A volleyball court is in a rectangular shape and its dimensions are directly proportional to the dimensions of the swimming pool given below. Find the width of the pool.



Q19) In a camp, there is enough flour for 300 persons for 42 days. How long will the flour last, if 20 more persons join the camp?

Q20) Ram types 108 words in 6 minutes. How many words would she type in half an hour?

Q21) Solve for x: $(3/5)^3 \times (3/5)^{-6} = (3/5)^{2x-1}$

Q22) Find the value of p, if $25^{(p-1)} + 100 = 5^{(2p-1)}$.

Q23) Find the value of:

(i) $(5^0 + 40^{-1}) \times 20^2$ (ii) $(2^{-1} \times 8^{-1}) \div 2^{-2}$ (iii) $(1/6)^{-2} + (1/8)^{-2} + (1/4)^{-2}$

Q24) Multiply the binomials.

(i) $(25x + 54)$ and $(3x - 3)$ (ii) $(7y - 8)$ and $(3y - 4)$

Q25) Simplify $[(-8/3)^2]^{-2}$

Subject Teacher

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Coordinator

Principal