



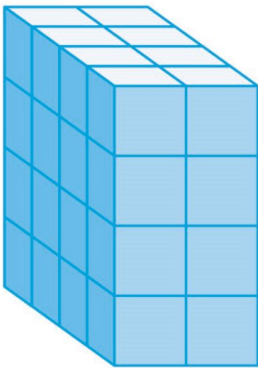
WORKSHEET 1- (Block 18,19 &20)

Subject: Mathematics

Class: 8

1. A cuboidal tank with the dimensions 40 cm ´ 65 cm ´ 80 cm contains water up to the height of 25 cm. How many liters of water would we need to add to raise the level to 40 cm? (1 cu. cm = 0.001 liter)

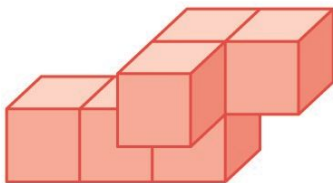
2. Choose the correct options to complete the sentences



- A. The height of the cuboid is _____ unit cubes.
- B. The length of the cuboid is _____ unit cubes.
- C. The width of the cuboid is _____ unit cubes.
- C. The volume of the cuboid is _____ unit cubes.

3. Simplify $\frac{x^5 - x^2 + 5x^3}{x^2}$.

4. Glen is building this shape. How many more unit cubes will he need to complete the cuboid?



- a. 12 unit cubes
- b. 6 unit cubes
- c. 4 unit cubes
- d. 10 unit cubes

5. Find the three terms whose product is $s^5t - st^7$.

6. Find the area of the circular base of a cylinder with a diameter of 14 cm and height of 20 cm.
(Use $\pi = \frac{22}{7}$)

Choose ALL the correct options.

- a. 196π sq. cm
- b. 49π sq. cm
- c. 140 sq. cm
- d. 154 sq. cm

7. Josh works for 4 hours a day and types 10^4 words. How many words can he type in 10^2 days if he works for the same number of hours each day?

8. Choose the correct options to complete the sentences

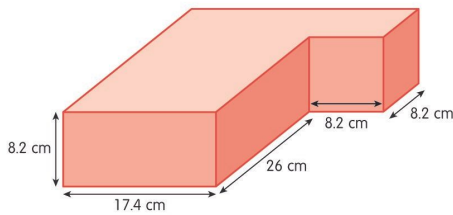
$$2pq \quad 2p^2q \quad p+q \quad p^2+q^2 \quad p+q^2$$

A. $(p - q)^2 = p^2 - \underline{\hspace{2cm}} + q^2$

B. $p^2 - q^2 = (p - q) \times (\underline{\hspace{2cm}})$

9. Simplify $\frac{a^2-16a-80}{a^2-a-20}$.

1. Find the volume of this shape.



2. A matchbox has the dimensions 4.5 cm \times 4 cm \times 1.5 cm.

A. What is the volume of a carton containing 15 such boxes?

B. How many such cartons can be placed in a large box of 48 cm \times 12 cm \times 40 cm?

3. Factorize the trinomials.

A. $x^2 - 8x + 12$

B. $2x^2 - 7x + 5$

4. Find the length and breadth of the rectangles. Verify your answer.

A.
$$\begin{array}{l} \text{Area =} \\ 5x + 15 + x(x + 3) \text{ sq. cm} \end{array}$$

B.
$$\begin{array}{l} \text{Area =} \\ (8x - 12 - 2yx + 3y) \text{ sq. cm} \end{array}$$

5. Solve the problems. (Use $\pi = \frac{22}{7}$)

A. The capacity of a cylindrical tank is 2,025 cu. m, and the diameter of its base is 21 m. Find the depth of the tank.

B. The circumference of a cylinder is 220 cm. If the height of the cylinder is 3.6 m, find the volume of the cylinder.