



Rosary School \ Marj Elhamam

Name :

Date : / 10 / 2025

Subject: practice Worksheet (2)

Grade : 6 ()

2.1 Rules of Divisibility

Q1: Answer the Following questions and explain your answer.

a. Is 248 divisible by 2? _____

b. Is 515 divisible by 5? _____

c. Is 396 divisible by 3? _____

d. Is 812 divisible by 4? _____

e. Is 666 divisible by 9? _____

f. Is 920 divisible by 10? _____

g. Is 72 divisible by 2 and 3? _____

Q2: Write a number divisible by 3, 4 and 5. _____

Q3: Which of these are divisible by 9? 63, 72, 95, 108, 123

Q4: A box of 180 oranges must be shared equally among 15 students. Can it be divided evenly?

Q5: A company prints 2,160 flyers. Can they pack them into boxes of 8 without leftovers?

2.2 Factors, Multiples, and Primes

Q1: List all factors of 24. _____

Q2: List all factors of 42. _____

Q3: List the first 5 multiples of 8. _____

Q4: Write all prime numbers between 20 and 50. _____

Q5: Is 91 a prime number? Explain why.

Q6: Work out the HCF of 18 and 24.

Q7: Work out the LCM of 6 and 9.

Q8: Work out the HCF and LCM of 10 and 25.

Q9: Leen has 15 red balloons and 25 blue balloons. She wants to pack them equally. What is the greatest number of packs she can make?

Q10: A bus stops every 12 minutes and a train every 18 minutes. After how many minutes will they meet together at the station?

2.3 Positive and Negative Numbers

Q1: Arrange the following numbers in ascending order:

-8 , 3 , -6 , 0 , 9 , -1

_____, _____, _____, _____, _____, _____

Smallest

Q2: Work out.

a. $8 + -10 =$ _____

f. $+ 2 \times + 4 =$ _____

b. $-14 - -6 =$ _____

g. $- 6 \times + 3 =$ _____

c. $-9 + 11 =$ _____

h. $+ 8 \times - 2 =$ _____

d. $-6 - 7 =$ _____

I. $- 7 \times - 5 =$ _____

e. $5 - -3 =$ _____

J. $- 10 \times +6 =$ _____

Q3: Compare: -5 -2

Q4: Draw a ring around the smallest number: $-2, -8, -12, 3, 0$

Q5: A submarine is 90 m below sea level. It rises by 40 m. What is its new depth?

Q6: The temperature was -6°C and rose by 10°C . What is the new temperature?

Q7: An elevator starts at floor 0, goes down 5 floors, then up 8 floors. What floor is it on?

Q8: A freezer temperature is -15°C . If it increases by 9°C , what is the new temperature?

2.4 Squares and Square Roots

Q1: Work out.

a. $6^2 =$ _____

b. $0.7^2 =$ _____

c. $\sqrt{81} =$ _____

d. $\sqrt{64} =$ _____

e. $\sqrt{100} \times \sqrt{25} =$ _____

f. $\sqrt{144} =$ _____

Q2: A square garden has a side length of 15 m. Find its area.

Q3: The area of a square is 49 cm². Find the length of one side.

Q4: Estimate: a. $\sqrt{6} =$ _____

b. $\sqrt{80} =$ _____

2.5 More Powers and Roots.

Work out.

a. $8^2 + 0.3^2 =$ _____

b. $10^2 - 6^2 =$ _____

c. $(5 + 2)^2 =$ _____

d. $\sqrt[3]{64} =$ _____

e. $\sqrt[3]{-27} =$ _____

f. $5 \times \sqrt[3]{125} - 15 =$ _____

g. $4 \times \sqrt[3]{8} =$ _____

h. $\frac{\sqrt[2]{81}}{3} - 4 =$ _____

i. $\sqrt[3]{216} =$ _____

j. $7 \times 2^3 =$ _____

k. $4^3 \times 6^2 =$ _____

2.6 calculations.

Q1: Write these calculations in ascending order:

$$\sqrt{16} + 3, \sqrt{25} - \sqrt[3]{8}, \sqrt{27} - 3.$$

_____, _____, _____

Smallest

Q2: Write these calculations in descending order:

$$\sqrt{64} - \sqrt[3]{27}, \sqrt{49} + 1, \sqrt{36} - 3.$$

_____, _____, _____

Largest

Q3: Work out.

a. $4(8 - 2) =$ _____

e. $(-2)^3 =$ _____

b. $(10 - 5)^2 =$ _____

c. $(2 + 3 \times 2)^2 =$ _____

f. $\sqrt{49} + 3 \times 5 =$ _____

d. $(15 \div 3 + 6)^2 =$ _____

h. $\sqrt{90 + 2 \times 5} =$ _____