

## Worksheet 1 | The Secondary Stage of (6-8)

1<sup>st</sup> Semester | 2023-2024

Subject: Math

Chapter: 1

Objectives:

- To review how to find roots of numbers.

### Square, cubes and roots

Q1. Workout:

a) $7^3 =$ $7 \times 7 \times 7 = \boxed{343}$	b) $8^2 =$ $8 \times 8 = \boxed{64}$	c) $13^2 =$ $13 \times 13 = \boxed{169}$
d) $3.3^2 =$ $3.3 \times 3.3 = \boxed{10.89}$	e) $0.4^3 =$ $0.4 \times 0.4 \times 0.4 = \boxed{0.064}$	f) $(-5)^2 =$ $-5 \times -5 = \boxed{25}$
g) $(-1.4)^2 =$ $-1.4 \times -1.4 = \boxed{1.96}$	h) $(-0.6)^3 =$ $-0.6 \times -0.6 \times -0.6 = \boxed{-0.216}$	i) $(-2.4)^2 =$ $-2.4 \times -2.4 = \boxed{5.76}$

Q2. Workout:

a) $\sqrt{64} = \boxed{\pm 8}$	b) $\sqrt{81} = \boxed{\pm 9}$	c) $\sqrt{196} = \boxed{\pm 14}$
d) $\sqrt{400} = \boxed{\pm 20}$	e) $\sqrt[3]{125} = \boxed{5}$	f) $\sqrt[3]{-1000} = \boxed{-10}$
g) $\sqrt[3]{343} = \boxed{7}$	h) $\sqrt[3]{-729} = \boxed{-9}$	i) $\sqrt[3]{-8} = \boxed{-2}$

Q3: workout, show your work:

a) $\sqrt{\frac{81}{100}} = \boxed{\pm \frac{9}{10}}$	b) $\sqrt{\frac{25}{49}} = \boxed{\pm \frac{5}{7}}$	c) $\sqrt{\frac{121}{144}} = \boxed{\pm \frac{11}{12}}$
d) $\sqrt{\frac{100}{225}} = \pm \frac{10}{15}$ $= \boxed{\pm \frac{2}{3}}$	e) $\sqrt{\frac{169}{324}} = \boxed{\pm \frac{13}{18}}$	f) $\sqrt{0.09} = \sqrt{\frac{9}{100}}$ $= \pm \frac{3}{10} = \boxed{\pm 0.3}$
g) $\sqrt{0.25} =$ $\sqrt{\frac{25}{100}} = \frac{5}{10}$ $= \boxed{\pm 0.5}$	h) $\sqrt{0.81} =$ $\sqrt{\frac{81}{100}} = \frac{9}{10}$ $= \boxed{\pm 0.9}$	i) $\sqrt{1.96} =$ $\sqrt{\frac{196}{100}} = \frac{14}{10}$ $= \boxed{\pm 1.4}$
j) $\sqrt{2.25} =$ $\sqrt{\frac{225}{100}} = \frac{15}{10}$ $= \boxed{\pm 1.5}$	k) $\sqrt{1.21} =$ $\sqrt{\frac{121}{100}} = \frac{11}{10}$ $= \boxed{\pm 1.1}$	l) $\sqrt{0.04} =$ $\sqrt{\frac{4}{100}} = \frac{2}{10}$ $= \boxed{\pm 0.2}$
m) $\sqrt[3]{\frac{8}{64}} = \frac{2}{4} = \boxed{\frac{1}{2}}$	n) $\sqrt[3]{\frac{27}{64}} = \boxed{\frac{3}{4}}$	o) $\sqrt[3]{\frac{1}{125}} = \boxed{\frac{1}{5}}$

<p>p) <math>\sqrt[3]{-\frac{8}{216}} = -\frac{2}{6}</math>  <math>= \boxed{-\frac{1}{3}}</math></p>	<p>q) <math>\sqrt[3]{\frac{512}{1331}} = \boxed{\frac{8}{11}}</math></p>	<p>r) <math>\sqrt[3]{0.008} =</math>  <math>\sqrt[3]{\frac{8}{1000}} = \frac{2}{10} = \boxed{0.2}</math></p>
<p>s) <math>\sqrt[3]{0.064} =</math>  <math>\sqrt[3]{\frac{64}{1000}} = \frac{4}{10} = \boxed{0.4}</math></p>	<p>t) <math>\sqrt[3]{-0.125} =</math>  <math>\sqrt[3]{-\frac{125}{1000}} = -\frac{5}{10}</math>  <math>= \boxed{-0.5}</math></p>	<p>u) <math>\sqrt[3]{-0.216} =</math>  <math>\sqrt[3]{-\frac{216}{1000}} = -\frac{6}{10}</math>  <math>= \boxed{-0.6}</math></p>