SHARP

Worksheet 2: Integers Revision

Grade 9 Mathematics

1. Without using your calculator, find the answers for these sums:

a)	-81 ÷ -9	b)	9 x 11 – 6(-5)	c)	95 + 12 ÷ 12 + 10
d)	10 + 13 – 12 ÷ 4	e)	10+ (-14) x 4	f)	12(-11) ÷ 3(-6)
g)	2 - 5÷ (15)(-2)	h)	8 + 9 x10 ÷ (3 + 7)	i)	8 .(-11).(-3) ÷ 6
j)	11 + 9 – (-10)	k)	-72÷ (-12) - 9	l)	(6 x 10) ÷ (0)
m)	(-49)÷(-4 + (-3))	n)	(5 + 5) x -2 ÷ (-4)	o)	-8 – 12 – (-20)
p)	20 × (5 + (-4))	q)	3 x (-3) x (-9 ÷1)	r)	(54 ÷ (-9)) × -6

2. Fill in the blanks:

a) You can never take the square-root of a _____ number.

b) You can take the _____ of a positive or negative number.

c) When a negative number is squared the answer is _____.

d) When a positive number is squared the answer is _____.

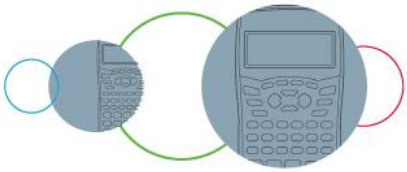
e) When a negative number is cubed the answer is _____.

f) When a positive number is cubed the answer is _____.

g) Before you can root something, you first need to make sure that there is _____ under the root sign.

3. Find the answers to these questions without using your calculator:

a)	$\sqrt[3]{100+25}$	b)	$\sqrt{9}+\sqrt{64}$	c)	$\sqrt[3]{-216}$
d)	$10^2+(-6)^3$	e)	$\sqrt{9+16}$	f)	$\sqrt{36}-2^3$
g)	$(1)^3+\sqrt{81}$	h)	$(-5)^2+(4)^3$	i)	$\sqrt[3]{216}-(-5)^3$
j)	$(-6)^2+(-2)^2$	k)	$\sqrt[3]{-1}+\sqrt{49}$	l)	$\sqrt{-64}$
m)	$(1)^2+(3+4)^2$	n)	$(12)^2+(-4)^3$	o)	$\sqrt{6^2+8^2}$
p)	$(5)^2+(4)^2$	q)	$1^3+(-2)^3$	r)	$(3)^3+(11)^2$



4. Match column A with the expression in column B that gives the same value:

Column A		Column B	
1	3 (2 +4)	a	4 x 10 + 4 x 8
2	17 + 19	b	(m + n) + p
3	6 x 9	c	9 x 6
4	(8 + 9) x 7	d	6 x (2 x 5)
5	m + (n + p)	e	3 x 2 + 3 x 4
6	4 x (10 + 8)	f	19 + 17
7	(6 x 2) x 5	g	7 x 8 + 7 x 9

5. Give the additive inverse (in other words the number that will make the sum 0) for each of these:

a) 16 b) 40 c) 25 d) -6

e) 62 f) -1 g) -64 h) -27

6. Give the multiplicative inverse (in other words the number that will multiply to make the given number 1) for each of these:

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

e) $-\frac{5}{6}$ f) 7 g) -49 h) $\frac{11}{9}$

7. Solly's teacher has a points system in his classroom. Today, Solly got 3 points for doing his maths homework, then another 5 points for helping his friend. But at break time Solly got into a fight and his teacher took away 10 points. How many points does Solly have at the end of the day?

8. Tara bakes 36 biscuits. She promises to give her grandmother 11. Her brother and her eat 12 of them, and she promises to give her mom 24 for work. How many more biscuits does Tara need to bake?

9. Johan and Thabo are playing a game of tug of war. Johan pulls Thabo 13m towards himself, and then another 4m towards him, but then Thabo pulls Johan 17m. Johan pulls back another 5m but Thabo regains his strength and pulls Johan 10m towards him. Who will win and by how much?