



The National
Orthodox School
Shmaisani

Mark

10

Subject: Mathematics

Second Semester / Quiz (1)

Name: Answers

Grade 8 CS ()

Date:

Question:

Simplify. Write with a single positive index.

10 marks

• $a^9 \times a^{-7} \times a^3$

$a^2 \times a^3$

a^5

• $b^9 \times b^{15} \div b^4$

$b^{24} \div b^4$

b^{20}

• $14a^7 \div 7a^{-3}$

$2a^{7-(-3)} = 2a^{10}$

• $2(b^5)^{-9}$

$2b^{-45} = \frac{2}{b^{45}}$

• $(3a^7b^3)^2$

$3^2 a^{14} b^6$

$9a^{14} b^6$



- $(-2pr^3) \times (3p^2r)$

$$-6p^3r^4$$

- $\frac{(2mr)^4}{(mr)^9} = \frac{2^4 m^4 r^4}{m^9 r^9} = 16 m^{-5} r^{-5} = \frac{16}{m^5 r^5}$

- $1a^3 + 6a^3 + 2b = 7a^3 + 2b$

- $15mnr + 6xy - 10xy - 3mnr$

$$12mnr - 4xy$$

- $2a^2b^2 + b^2 - 2a^2b^2 - 3b^2 + c^3$

$$c^3 - 2b^2$$

or

$$-2b^2 + c^3$$

