Year 8 Class 5 questions

Q1

Evaluate.

$(4-6)^4 =$ [ ]

16

Q2

Simplify $a^2 \times b^3 \times a^5$.

→ ○ a^7b^3 ○ a^7b^2 ○ a^6b^5

Q3

Simplify $(3a)^2$.

→ ○ $9a^2$ ○ $3a$ ○ $5a^2$

Q4

Evaluate: $(7a)^0 =$ [ ] 1

Q5

$48.394 + 229.094 + 21.7 =$ [ ]

299.188

Q6

Simplify.

$4^3 \times 4^6 \times 4^4 =$ [ ] 4^{13}

12^{14} 64^{14} 4^{13} 4^{72}

Q7

Simplify.

$2^9 \div 2^3 =$ [ ] 2^6

2^3 1 2^6 2^{12}

Q8

Simplify $y^3z \times y^3z$.

○ y^9z^2 ○ y^6z → ○ y^6z^2

Q9

Simplify $a^6 \times a^{-2}$.

→ ○ a^4 ○ a^3 ○ a^{-2}

Q10

Simplify $(y^{-1})^7$.

○ y^{-1} ○ y^7 → ○ y^{-7}

Q11

Simplify $(n^{-3})^{-4}$.

→ ○ n^{12} ○ n^{11} ○ n^8

Q12

Evaluate: $-6 \times (-2a)^0 =$ [ ] -6

Q13

Evaluate: $7b^0 + (2b)^0 =$ [ ] 8

Q14

$90.06 + 67.3625 + 232.99 + 17 =$ ____

407.4125

Q15

$65.069 + 129.317 + 23.74 + 89 =$ ____

307.126

Q16

Simplify.

$(10^2)^4 =$ ____ 10^8

HINT : $(10^2)^4 = 10^2 \times 10^2 \times 10^2 \times 10^2$

10^8 10^6 10^2 100^6

Q17

Simplify.

$(6^5)^3 =$ ____ 6^{15}

HINT : $(6^5)^3 = 6^5 \times 6^5 \times 6^5$

6^8 6^2 6^{15} 216^{15}

Q18

Simplify.

$(4^4)^3 =$ ____ 4^{12}

HINT : $(4^4)^3 = 4^4 \times 4^4 \times 4^4$

4^{12} 4^7 64^4 64^{12}

Q19

Simplify $3a^2b \times (-2a^2b^3)$.

○ $-6a^4b^3$ → ○ $-6a^4b^4$ ○ $-5a^4b^4$

Q20

Simplify $3b^2c \times (-2bc) \times (-b^2c)$.

○ $-6b^5c^3$ ○ $6b^4c^3$ → ○ $6b^5c^3$

Q21

Simplify $mn \times 3m \times 2m^3n$.

○ $6m^3n^4$ ○ $5m^5n^2$ → ○ $6m^5n^2$

Q22

Simplify $(-3a^2b)^2$.

○ $-9a^4b^2$ ○ $-6a^4$ → ○ $9a^4b^2$

Q23

Simplify $(8p^4q^3)^2$.

○ $64pq^6$ ○ $64pq$ → ○ $64p^8q^6$

Q24

Simplify $(-2x^5y^2)^3$.

→ ○ $-8x^{15}y^6$ ○ $-8x^6y^6$ ○ $-8x^6y^{15}$

Q25

Select all the true statements.

☐ $(3a)^0 + 3a = 4a$

→ ☐ $m^5 \div m^5 + 4m^0 = 5$

→ ☐ $4p^0 + (4p)^0 = 5$

☐ $4 \times (2a)^0 = 8$

Q26

Select all the true statements.

- [x] $4 \times (2a)^0 = 4$
- [x] $(-8m)^0 = 1$
- [ ] $m^7 \div m^7 + 4m = 5m$
- [x] $m - 7m^0 = m - 7$

Q27

Select all the true statements.

- [x] $-5 \times (3a)^0 = -5$
- [ ] $-5 \times 3a^0 = -5$
- [x] $(4a^2)^2 \div 8a^4 + a^0 = 3$
- [x] $a^6 \div a^6 + 3a^0 = 4$

Q28

$3.5 + 4.2 + \square = 9.5$ 1.8

1.4 1.8 2.3 3.4

Q29

$2.1 + 3.5 + \square = 11.7$ 6.1

7.1 6.4 5.6 6.1

Q30

$\square + 1.3 + 4 = 11.82$ 6.52

6.52 6.8 6.2 7.1