Year 8 Class 3 questions

Q1

$-5 + (-3) =$ ☐

Q2

$(-3)^2 =$ ☐

Q3

$28 \div (-4) =$ ☐

Q4

$-5 + -7 \times -3 =$ ☐

Q5

If $3^{10} \div 3^2 = 3^A$,

then $A =$ ☐

Q6

Simplify $m \div m^4$.

○ m^3 ○ $2m$ ○ $\frac{1}{m^3}$

Q7

$33 - (-18) =$ ☐

Q8

$8 - (-8) =$ ☐

Q9

$8 - (-15) =$ ☐

Q10

$\left[6 \times -3 + -2\right] \div 2 =$ ☐

Q11

$\left[7 \times -2 + -1\right] \div -3 =$ ☐

Q12

$\left[-2 \times -4 - 6\right] \times 11 =$ ☐

Q13

Evaluate: $4^0 - 4 =$ ☐

Q14

Evaluate: $3^0 + 3^2 =$ ☐

Q15

Evaluate: $-5 + (2 - 3^0) =$ ☐

Q16

Simplify $\frac{36x^2y^4}{9xy^2}$.

○ $4y^4$ ○ $4x$ ○ $4xy^2$

Q17

Simplify $18m^6 \div 2m^3$.

○ m^3 ○ $20m$ ○ $9m^3$

Q18

Simplify $5a^2b^3 \div 10a^3b$.

○ $\frac{b^2}{2a}$ ○ $2ab$ ○ ab

Q19

$-12 + (-15) =$ ☐

Q20

$-19 + (-7) =$ ☐

Q21

$-9 + (-19) =$ ☐

Q22

Find the missing number that makes this number sentence correct.

$-6 - (\square \times -2) = -12$

-1 -2 -3 2

Q23

Find the missing number that makes this number sentence correct.

$-8 + \square \times 4 = -28$

-9 1 -5 5

Q24

Find the missing number that makes this number sentence correct.

$-5 - \square \times 3 = -2$

-1 1 -3 -2

Q25

If $2^4 \times 3^2 \times 2^5 = 2^A \times 3^B$,

then $A =$ ☐, $B =$ ☐

Q26

If $2^6 \times 3^4 \times 2^2 \times 3^5 = 2^A \times 3^B$,

then $A =$ ☐, $B =$ ☐

Q27

If $3^4 \times 5^2 \times 3 \times 5^4 = 3^A \times 5^B$,

then $A =$ ☐, $B =$ ☐

Q28

Simplify $\frac{16ab^4c}{20ab^4c}$.

○ $\frac{4}{5}$ ○ $-\frac{4}{5}$ ○ $\frac{5}{4}$

Q29

Simplify $\frac{4m^3n^5}{-8mn^6}$.

○ $\frac{2mn}{4mn}$ ○ $\frac{m}{n}$ ○ $-\frac{m^2}{2n}$

Q30

Simplify $\frac{45x^2y^3z^5}{63x^4yz^3}$.

○ $\frac{5y^2}{7x}$ ○ $\frac{5y^2z^2}{7x^2}$ ○ $\frac{45}{63}$