

Year 9 Class 4 questions

Q1

Expand and simplify $10a - (3a + 7)$.

- 0
 14a
 $7a - 7$
 $7a + 7$

Q2

Expand and simplify $(x + 5)^2$.

- $x^2 + 5x + 25$
 $x^2 + 5x + 10$
 $x^2 + 10x + 25$

Q3

Factorise $x(x + 9) + y(x + 9)$.

- $(x + y)(y + 9)$ $(x + 9)(x + y)$
 $(x + 9)(y + 9)$ $(x - 9)(x + y)$

Q4

Expand and simplify $3x + y - 2(x - y)$.

- $x + 3y$
 $x - 5y$
 $4x + 2y$
 $6xy$

Q5

Expand and simplify $8m - (2 + 3m)$.

- $6m - 2$
 $m + 5$
 $11m - 2$
 $5m - 2$

Q6

Expand and simplify $(2 - a)^2$.

- $a^2 - 28a + 196$
 $a^2 - 4a + 4$
 $a^2 - 14a + 49$

Q7

Expand and simplify $(1 - y)^2$.

- $y^2 - 8y + 16$
 $y^2 - 10y + 25$
 $y^2 - 2y + 1$

Q8

Factorise $b(x + 3) - 2(x + 3)$.

- $(b + 2)(x - 3)$ $(b + 2)(x + 3)$
 $(b + 3)(x - 2)$ $(x + 3)(b - 2)$

Q9

Factorise $a(m + 5) - 5(m + 5)$.

- $(m + 5)(a - 5)$ $(a + 5)(m - 5)$
 $(a + 5)(m + 5)$ $(a + m)(a - 5)$

Q10

Expand and simplify $3(x + 2y) + 2(4x - 3y)$.

- $11x$
 $6x^2 + 12x$
 $12x^2 - 8x$
 $12x^2$

Q11Expand and simplify $6(a+2b)+a(3+2b)$.

- $2a^2+12b+9$
 $9a-2b+12ab$
 $9a+12b+2ab$
 $12a^2-9b+2$

Q12Expand and simplify $5x(x-2)-2(2-5x)$.

- $12x-5$
 $2x^2-6$
 $5x^2-4$
 $4x^2+5$

Q13Expand and simplify $(10-x)^2$.

- $x^2-10x+20$
 $20-20x-x^2$
 $x^2-20x+100$

Q14

Expand and simplify:

$$(2a-2b)^2 = \boxed{}_4 a^2 - \boxed{}_8 ab + \boxed{}_4 b^2$$

Q15

Expand and simplify:

$$\left(2p + \frac{1}{2}\right)^2 = \boxed{}_4 p^2 + \boxed{}_2 p + \frac{\boxed{}}{\boxed{}} \frac{1}{4}$$

Q16Factorise $x^2(x-3)+8(x-3)$.

- $(x-3)(x+8)$ $(x-3)(x^2+8)$
 $(x-3)(x^2-8)$ $8x^2(x-3)$

Q17Factorise $x^2(x-4)+3y(x-4)$.

- $(x-4)(3x^2+y)$ $(x-4)(x^2+y)$
 $(x-4)(3x^2-y)$ $(x-4)(x^2+3y)$

Q18Factorise $y(x+2y)+x^2(2y+x)$.

- $(x+2y)(x^2+y^2)$ $(x+2y)(y^2+x)$
 $(x+2y)(y+x^2)$ $(2x+y)(y+x^2)$

Q19Expand and simplify $8pq-3p(p+2q)$.

- $6p^2q$
 $2pq-3p^2$
 $2p^2q+2p$
 $3p^2+2pq$

Q20Expand and simplify $5a^2-2a(2a+b-3)$.

- $6a^2-2ab+4$
 $2a^2+6ab$
 $a^2+6ab-2a$
 $a^2-2ab+6a$

Q21Expand and simplify $4(3-2j)+5(3j-2)$.

- $7j+2$
 $2j+7j$
 $7j-2j$
 $j-7j$

Q22Expand and simplify $12xy-6x(x-2y)$.

- $6xy+24x$
 $24xy-6x^2$
 $4xy+20x^2$
 $24x^2y-6x$

Q23Expand and simplify $(4x-\frac{1}{2})^2$.

- $4x^2-4x+\frac{1}{4}$
 $16x^2-2x+1$
 $16x^2-4x+\frac{1}{4}$

Q24Expand and simplify $(-2x-5)^2$.

- $4x^2+20x+25$
 $4x^2+10x-25$
 $4x^2+25$

Q25Expand and simplify $(3x+2y)^2$.

- $9x^2+6xy+4y^2$
 $9x^2+4y^2$
 $9x^2+12xy+4y^2$

Q26Expand and simplify $(6b-\frac{1}{3})^2$.

- $9b^2-2b+\frac{1}{9}$
 $9b^2-b+\frac{1}{36}$
 $36b^2-4b+\frac{1}{9}$

Q27Factorise $7x(x-3)+(x-3)$.

- $7x(x-3)$ $(x-3)(7x-1)$
 $(x-3)(x+7)$ $(x-3)(7x+1)$

Q28Factorise $x(2x+3)-(2x+3)$.

- $(2x+3)(x-1)$ $(2x-3)(x-1)$
 $(2x+3)(x+1)$ $x(2x-3)$

Q29Factorise $(x^2-2y)+5x(x^2-2y)$.

- $(x^2-2y)(1+5x)$ $5x(x^2-2y)$
 $(x^2-2y)(x+5)$ $(x^2-2y)(x-5)$

Q30Factorise $(2y-x^2)+3x(2y-x^2)$.

- $(2y-x^2)(1+3x)$ $(2y-x^2)(3+x)$
 $(2y-x^2)(2y+3x)$ $3x(2y-x^2)$