Year 8 Class 13 questions

Q1

Expand $6(2-x)$.

- $\bigcirc$ $-6x$
- $\bigcirc$ $6x-12$
- $\bigcirc$ $12-6x$
- $\bigcirc$ $8-6x$

Q2

Expand:

$3(2-x) = $ ☐

Q3

Expand $2a(3b+c)$.

- $\bigcirc$ $6abc$
- $\bigcirc$ $3b+2ac$
- $\bigcirc$ $6ab+2ac$
- $\bigcirc$ $6ab+c$

Q4

Expand $3x(x+y)$.

- $\bigcirc$ $3x+3xy$
- $\bigcirc$ $3x^2y$
- $\bigcirc$ $3x^2+y$
- $\bigcirc$ $3x^2+3xy$

Q5

Expand and simplify $3(2n-m)+4m$.

- $\bigcirc$ $10mn$
- $\bigcirc$ $6m+2n$
- $\bigcirc$ $6n+m$
- $\bigcirc$ $6n-3m$

Q6

Factorise:

$5m^2 + 2m = $ ☐ $(5m + 2)$

Q7

Expand $4(3-5c)$.

- $\bigcirc$ $12-5c$
- $\bigcirc$ $12-20c$
- $\bigcirc$ $3-20c$
- $\bigcirc$ $7-9c$

Q8

Expand:

$3(5-a) = $ ☐

Q9

Expand:

$4(7-5c) = $ ☐

Q10

Expand $3x(2x-y)$.

- $\bigcirc$ $6x^2y-2x$
- $\bigcirc$ $6x^2-3xy$
- $\bigcirc$ $6x^2y-3x$
- $\bigcirc$ $6x^2y^2$

Q11

Expand $2p(q+3p)$.

- $\bigcirc$ $2p+6p^2q$
- $\bigcirc$ $2pq+6p^2$
- $\bigcirc$ $2pq^2+6$
- $\bigcirc$ $6p^2q^2$

Q12

Expand $-3(10-a)$.

○ $-30+3a$

○ $-3a-30$

○ $-30-a$

○ $-27a$

Q13

Expand and simplify $4x+2x(x+4)$.

○ $8x^2+2x$

○ $8x+4$

○ $12x^2$

○ $12x+2x^2$

Q14

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

○ $10x-2$

○ $5x^2-8x$

○ $20x-x$

○ $10x^2+5$

Q15

Expand and simplify $2c-2(3-c)$.

○ $3c-6$

○ $-2c$

○ $4c-6$

○ -6

Q16

What is the highest common factor of $100x^2y$ and $75xy^2$?

$25xy$ $\quad$ $25x^2y^2$ $\quad$ $150xy$ $\quad$ $50xy$

Q17

Factorise:

$18+54ab-27a =$ ☐ $(2+6ab-3a)$

Q18

Factorise fully $18y-6ay$.

○ $6y(3-a)$

○ $2y(4-3a)$

○ $2y(8-3a)$

Q19

Expand $2(3a+2b+4c)$.

○ $6a+4b+8c$

○ $6a+2b+4c$

○ $18abc$

○ $3a+4b+8c$

Q20

Expand $5(3a+5b-c)$.

○ $3a+25b-5c$

○ $15a+25b-5c$

○ $3a+5b-5c$

○ $15a+5b-c$

Q21

Expand:

$4(a+3) =$ ☐

Q22

Expand $-(x+y+z)$.

○ $-x+y+z$

○ $-xyz$

○ $-x-y-z$

○ $-x+y-z$

Q23

Expand $a(2-3b+4y)$.

○ $2a+3ab+4ay$

○ $-12aby$

○ $2a-3ab+4ay$

○ $2a-6b+4y$

Q24

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

○ $-4x+8y-6$

○ $4x+6y-8$

○ $-24xy$

○ $-4x+6y-8$

Q25

Expand and simplify $5p+2p(p+3)$.

○ $5p+8p^2$

○ $2p^2+11p$

○ $13p^2$

○ $2p^2+8p$

Q26

Expand and simplify $5(x+2)+4(x+6)$.

○ $17x$

○ $9x+34$

○ $9x+8$

○ $9x+16$

Q27

Expand and simplify $5x(x-2)+3(2x-6)$.

○ $5x^2-18x$

○ $5x^2-4x$

○ $5x^2-4x-18$

○ $10x^2-3x-12$

Q28

Factorise fully $5x^3-10x^2$.

○ $5x^2(x-2)$

○ $x^2(5x-8)$

○ $2x^2(2x-5)$

Q29

Factorise fully $-36m+48m^2$.

○ $-12m(3-4m)$

○ $4m(10m-9)$

○ $2m(24m-17)$

Q30

Factorise fully $12ax-20y+40x$.

○ $4(3ax-5y+5x)$

○ $4(3ax-5y+10x)$

○ $2(6ax-5y+20x)$