

Year 8 Class 13 questions

Q1

Expand $6(2-x)$.

- $-6x$
- $6x-12$
- $12-6x$
- $8-6x$

Q2

Expand:

$$3(2-x) = \boxed{} \quad \boxed{6-3x}$$

Q3

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

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

Q4

Expand $3x(x+y)$.

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

Q5

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

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

Q6

Factorise:

$$5m^2 + 2m = \boxed{} (5m + 2)$$

m

Q7

Expand $4(3-5c)$.

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

Q8

Expand:

$$3(5-a) = \boxed{} \quad \boxed{15-3a}$$

Q9

Expand:

$$4(7-5c) = \boxed{} \quad \boxed{28-20c}$$

Q10

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

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

Q11

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

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

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 $75xy^2$?

- $25xy$ $25x^2y^2$ $150xy$ $50xy$

Q17

Factorise:

$$18 + 54ab - 27a = \boxed{9} (2 + 6ab - 3a)$$

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:

$$4(a+3) = \boxed{} \quad 4a+12$$

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 $12ax-20y+40x$.

- $4(3ax-5y+5x)$
- $4(3ax-5y+10x)$
- $2(6ax-5y+20x)$