

Solutions – Factorising (A)

Factorise $72b + 9$.

$$9(8b + 1)$$

Factorise $8a + 16$.

$$8(a + 2)$$

Factorise $3c^2 - 9a - 12$.

$$3(c^2 - 3a - 4)$$

Factorise $28a - 28$.

$$4(7a - 7)$$

Factorise $9a - 45$.

$$9(a - 5)$$

Factorise $2c^2 - 6b + 10$.

$$2(c^2 - 3b + 5)$$

Solutions – Factorising (B)

Factorise $8b^2 - 8x + 16$.

$$2(4b^2 - 4x + 8)$$

Factorise $3b + 18$.

$$3(b + 6)$$

Factorise $49b + 49$.

$$7(7b + 7)$$

Factorise $3y - 12$.

$$3(y - 4)$$

Factorise $18x^2 + 18b - 45$.

$$9(2x^2 + 2b - 5)$$

Factorise $16y + 8$.

$$4(4y + 2)$$

Solutions – Factorising (C)

Factorise $-35x^2 + 21b - 14$.

$$7(-5x^2 + 3b - 2)$$

Factorise $9a - 81$.

$$9(a - 9)$$

Factorise $28x - 4$.

$$4(7x - 1)$$

Factorise $24y - 36$.

$$6(4y - 6)$$

Factorise $3b^2 + 9x + 3$.

$$3(b^2 + 3x + 1)$$

Factorise $8b + 8$.

$$8(b + 1)$$

Solutions – Factorising (D)

Factorise $30b - 30$.

$$5(6b - 6)$$

Factorise $3b + 6$.

$$3(b + 2)$$

Factorise $3b - 21$.

$$3(b - 7)$$

Factorise $27a^2 + 9y + 54$.

$$9(3a^2 + y + 6)$$

Factorise $-2y^2 - 8x + 6$.

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

Factorise $36c - 54$.

$$9(4c - 6)$$

Solutions – Factorising (E)

Factorise $9b + 45$.

$$9(b + 5)$$

Factorise $-16x^2 - 24b + 72$.

$$8(-2x^2 - 3b + 9)$$

Factorise $-3x^2 + 9y - 12$.

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

Factorise $12x - 12$.

$$3(4x - 4)$$

Factorise $7a - 28$.

$$7(a - 4)$$

Factorise $63c - 27$.

$$9(7c - 3)$$

Solutions – Factorising (F)

Factorise $7y + 21$.

$$7(y + 3)$$

Factorise $18b - 24$.

$$6(3b - 4)$$

Factorise $8c + 56$.

$$8(c + 7)$$

Factorise $42c + 42$.

$$6(7c + 7)$$

Factorise $45a^2 + 27y + 9$.

$$9(5a^2 + 3y + 1)$$

Factorise $-5y^2 + 20x + 40$.

$$5(-y^2 + 4x + 8)$$

Solutions – Factorising (G)

Factorise $2a + 6$.

$$2(a + 3)$$

Factorise $24a + 48$.

$$8(3a + 6)$$

Factorise $-40a^2 + 16x + 72$.

$$8(-5a^2 + 2x + 9)$$

Factorise $9b + 81$.

$$9(b + 9)$$

Factorise $24y^2 + 6x + 6$.

$$6(4y^2 + x + 1)$$

Factorise $14c + 2$.

$$2(7c + 1)$$

Solutions – Factorising (H)

Factorise $63a - 56$.

$$7(9a - 8)$$

Factorise $4a - 8$.

$$4(a - 2)$$

Factorise $-5c^2 - 20x - 25$.

$$5(-c^2 - 4x - 5)$$

Factorise $16a - 8$.

$$4(4a - 2)$$

Factorise $3c - 24$.

$$3(c - 8)$$

Factorise $-10c^2 + 10b + 30$.

$$5(-2c^2 + 2b + 6)$$

Solutions – Factorising (I)

Factorise $8a + 56$.

$$8(a + 7)$$

Factorise $3b + 21$.

$$3(b + 7)$$

Factorise $24c - 4$.

$$4(6c - 1)$$

Factorise $-10x^2 + 8y + 8$.

$$2(-5x^2 + 4y + 4)$$

Factorise $4c^2 - 8a + 36$.

$$4(c^2 - 2a + 9)$$

Factorise $72y - 72$.

$$8(9y - 9)$$

Solutions – Factorising (J)

Factorise $6b^2 + 2y - 18$.

$$2(3b^2 + y - 9)$$

Factorise $12x^2 - 12b + 12$.

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

Factorise $54b - 48$.

$$6(9b - 8)$$

Factorise $4a - 4$.

$$4(a - 1)$$

Factorise $18c - 6$.

$$2(9c - 3)$$

Factorise $5y - 15$.

$$5(y - 3)$$