= 125 cheires

Home Assignment 4/10/2021

{ Exercise - 19(C) Q 2, 3, 7
Exercise - 19(D) Q 2, 3 }

19 (C)

2. i) $4x \times 6x \times 2 = 48x^2$

ii) $3ab \times 6ax = 18a^2x$

iii) $x \times 2x^2 \times 3x^3 = 6x^6$

iv) $5 \times 5a^3 = 25a^3$

v) $6 \times 6x^2 \times 6x^2y^2 = 216x^4y^2$

vi) $-8x \times -3x = 24x^2$

vii) $-5 \times -3x \times 5x^2 = 17x^3$

viii) $2 \times -4xy^2 \times 3x^3y^2 = -96x^4y^4$

ix) $-4x \times 5xy \times 3z = -60x^2yz$

x) $5x \times 2x^2y \times -7y^3 \times 2x^3y^2$

$= -140x^6y^6$

3. i) $15x^7$
ii) $35a^9$
iii) $18a^2bc^4$
iv) $5a^5b^6$
v) $10x^5y^7$
vi) ab^2c^2d

7. i) [illegible]
ii) $5x$

7. $x+2 \times x+10$
i) $= x^2 + 2x + 20$

ii) $x+5 \times x-3$
$= x^2 + 5x - 15$

iii) $x-5 \times x+3$
$= -x^2 - 5x + 15$

iv) $x-5 \times x-3$

7.
i) $(x+2)(x+10)$
$= x^2 + 10x + 2x + 20$
$= x^2 + 12x + 20$

ii) $(x+5)(x-3)$
$= x^2 - 3x + 5x - 15$
$= x^2 + 2x - 15$

iii) $(x-5)(x+3)$
$= x^2 + 3x - 5x - 15$
$= x^2 - 2x - 15$

iv) $(x-5)(x-3)$
$= x^2 - 3x - 5x + 15$
$= x^2 - 8x + 15$

v) $(2x+y)(x+3y)$
$= 2x^2 + 6xy + yx + 3y^2$
$= 2x^2 + 7xy + 3y^2$

vi) $(3x-5y)(x+6y)$
$= 3x^2 + 18xy - 5yx - 30y^2$
$= 3x^2 + 13xy - 30y^2$

vii) $(x+9y)(x-5y)$
$= x^2 - 5yx + 9yx - 45y^2$
$= x^2 + 4yx - 45y^2$

viii) $(2x+5y)(2x+5y)$
$= 4x^2 + 10xy + 10yx + 25y^2$
$= 4x^2 + 20xy + 25y^2$

Ex - 19 (D)

2.

i) $2x^5 \div x^2$
$= 2x^3$

ii) $6a^8 \div 3a^3$
$= 2a^5$

iii) $20xy \div -5xy$
$= -4$

iv) $-24a^2b^2c^2 \div 6ab$
$= -4abc^2$

v) $-5x^2y \div xy^2$
$= -5xy$

vi) $40p^3q^4r^5 \div 10p^3q$
$= 4q^3r^5$

vii) $-64x^4y^3z \div 4x^3y^2z$
$= -16xyz$

viii) $35xy^5 \div 7x^2y^4$
$= 5xy$

3. i) $-\frac{3m}{4}$ by $2m$

$= \frac{-3m}{8}$

ii) $-15p^6q^8$ by $-5p^6q^7$

$\frac{-15p^6q^8}{-5p^6q^7} = 3q$

iii) $-21m^5n^7$ by $14m^2n^2$

$$\frac{-21m^5n^7}{14m^2n^2} \quad \frac{-21m^3n^5}{14}$$

iv) $\frac{36a^4x^5y^6}{4x^2a^3y^2} : 9x^3y^4$

v) $\frac{20x^3a^6}{5xy} = 4x^2a^6y$

vi) $\frac{28a^2b^3}{c^2} \div 4abc$

$$\frac{28a^2b^3}{c^2} \times \frac{1}{4abc}$$

$$= \frac{7ab^2}{c^3}$$

vii) $\frac{2a^2}{9b^2} \div \frac{3b}{2a}$

$$= \frac{2a^2}{9b^2} \times \frac{2a}{3b}$$

$$= \frac{4a^3}{27b^3}$$

viii) $-\frac{5.5x^2}{y} \div \frac{10x}{y}$

$$= -\frac{55x^2}{10y} \div \frac{11}{y}x$$

$$= -\frac{55x^2}{10y} \div \frac{y}{11x}$$

$$= -\frac{5x}{10}$$

ix) $\frac{64x^2y^3}{z^2} \div \frac{8xy}{z}$

$$\frac{64x^2y^2}{z^2} \times \frac{z}{8xy}$$

$$= \frac{8xy}{z}$$