01

أنـــشـــر:

$\frac{2}{3}x\left(6-\frac{1}{2}x+\frac{4}{3}x^2\right)$ ؛ $6x(x+7)$ ؛ $\frac{3}{5}\left(2-\frac{10}{3}x\right)$ ؛ $\frac{4}{3}\left(x+\frac{9}{10}\right)$

$-9x^2y\left(-2xy+x^3y^2-5\right)$ ؛ $-\frac{8}{7}xy\left(-\frac{14}{3}x+5xy^2-\frac{21}{4}\right)$ ؛ $-3x^4\left(x^2-2x+3\right)$

02

عـــمـل:

$14x^3-21x^2+7x$ ؛ $-\frac{12}{55}x^2+\frac{18}{11}x$ ؛ $9xy+6x-3xy^2$ ؛ $24-8x$ ؛ $\frac{10}{3}x+\frac{5}{12}$

$-6x^4y^3-17x^3y^5+10x^5y^2$ ؛ $\frac{15}{8}x^2y-\frac{9}{20}xy^2+\frac{3}{16}xy$ ؛ $-12x^3+8x^5-20x^7$

03

بـــســط:

$-\frac{2}{3}x+\frac{5}{3}x$ ؛ $-6x-6x$ ؛ $4x^2-9x^2$ ؛ $7x^3-x^3$ ؛ $x+4x$

$-\frac{5}{6}x+\frac{7}{3}-x-\frac{16}{9}$ ؛ $-5x-3+9x-7$ ؛ $x+6-5x+2$ ؛ $2x+\frac{5}{6}+\frac{3}{7}x+\frac{1}{3}$

$-4x^5+1-x-4x^5+2x-7$ ؛ $x^4-x^2-\frac{5}{4}x^4+3x^2$ ؛ $4x^2+x+5x^2+6$

04

أنـشـــر وبـــسط:

$5-3(2-x)$ ؛ $\frac{4}{3}(2-x)+\frac{2}{5}\left(\frac{5}{6}x-1\right)$ ؛ $3(3-x)+2(x-1)$ ؛ $2x+4(x+2)$

$-4x(3-2x)-5(-1-2x)$ ؛ $-6x(1-2x)-4(1-2x+3x^2)$ ؛ $4(2-3x)-2(x-1)$

05

عـــمل:

$(x+7)^2-3(x+7)$ ؛ $6x^2(x+4)-6x^2$ ؛ $x(2-5x)+3(2-5x)$

$(3x-4)^7-(3x-4)^8$ ؛ $(5-4x)(x+3)-(5-4x)^2$ ؛ $4(2x+1)-(3-x)(2x+1)$

06

أنـشـــر وبـــسط:

$(2+x)(1-3x)$ ؛ $(1-x)(4-x)$ ؛ $(x-2)(x+5)$ ؛ $(x+3)(1+x)$

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

07

أنـشـــر باستعمال المتطابقات الهامة:

$\left(\frac{3}{4}-\frac{2}{5}x\right)^2$ ؛ $(2x-3)^2$ ؛ $\left(2x+\frac{1}{3}\right)^2$ ؛ $(4-x)^2$ ؛ $(x+8)^2$

$\left[(2x-1)(1+2x)\right]^2$ ؛ $\left(\frac{5}{3}+x\right)\left(x-\frac{5}{3}\right)$ ؛ $(7+x)(x-7)$ ؛ $(x-6)(x+6)$

08

عـــمـل باستعمال المتطابقات الهامة:

$25x^2-\frac{20}{3}x+\frac{4}{9}$ ؛ $1+6x+9x^2$ ؛ $1-2x+x^2$ ؛ $x^2+8x+16$

$x^6+x^3+\frac{1}{4}$ ؛ $49-70x+25x^2$ ؛ x^4-12x^2+36 ؛ $4x^2+12x+9$

09

عـــمل:

$64-(1-5x)^2$ ؛ $\frac{49}{25}-\frac{1}{16}x^2$ ؛ $4x^2-\frac{1}{25}$ ؛ $1-9x^2$ ؛ x^2-36

10

عـــمـل:

$3x^2-30x+75$ ؛ $9-x^2+(x+3)^2$ ؛ $2x-6-(x-3)^2$ ؛ $(4x+5)^2+5+4x$

$1+14x+49x^2-(x-3)(7x+1)$ ؛ $8x^3-24x^2-(5+x)(x-3)$ ؛ $9x^2-(2-x)^2$

11

أحسب A و B :

$$A=777777^2-222223^2$$

$$B=999999^2-2\times999999\times999998+999998^2$$