

(I)

$$B = 3\left(1 + \frac{1}{3} - \frac{3}{2}\right) + \left(2 - \frac{1}{3}\right)\left(2 - \frac{3}{2}\right)$$

$$A = \frac{\sqrt{2} - \frac{1}{\sqrt{2}}}{\sqrt{2} + \frac{1}{\sqrt{8}}}$$

1+1

$$D = \frac{\sqrt{2}}{\sqrt{2}-1} - \frac{2\sqrt{3}}{\sqrt{3}-1} + \frac{1}{\sqrt{3}+\sqrt{2}}$$

$$C = \frac{6^2 \cdot 15^3 \cdot 3^{-4} \cdot 40}{2^3 \cdot 50^2 \cdot 3^1}$$

1+1

$$Y = 10^2 \cdot 14$$

$$X = 10^2 \cdot 15$$

(II)

PPCM(X, Y)

PGCD(X, Y)

1

Y X -

-

IN k (2)

k+10

k

k

1

11

(3) بين أن لكل n من العدد IN $2 \cdot 5^{n+1} + 5^n$

1

$$I =]-\infty, 3]$$

$$J =]-2, 5]$$

$$K =]4, 6[$$

(III)

1

K J I -

1.5

I ∪ K I ∩ K و I ∩ J -

$$F = \{x \in \mathbb{R} / |x| > 1\}$$

$$E = \{x \in \mathbb{R} / |x-1| < 3\}$$

1

F E -

0.5

E ∩ F -

$$2\sqrt{7} \quad 3\sqrt{3} \quad \text{قارن العددين (1) (IV) 0.5}$$

$$(3\sqrt{3} - 2\sqrt{7})^2 \quad (2) \quad 0.5$$

$$x \quad x = \sqrt{55 - 12\sqrt{21}} \quad (3) \quad 1$$

$$1,7 < \sqrt{3} < 1,8 \quad 2,6 < \sqrt{7} < 2,7 \quad (4)$$

1

x -

1

0,3 x -

(V)

x و y عدنان موجبان قطعاً بحيث $x < y$

$$x^2 < xy \quad xy < y^2 \quad \text{بين أن (1) 1}$$

$$x < \sqrt{10} < y \quad xy = 10 \quad (2) \quad 1$$

$$\frac{60}{19} < \sqrt{10} < \frac{19}{6} \quad (3) \quad 1$$

$$3,157 < \frac{60}{19} < 3,158 \quad \text{و} \quad 3,166 < \frac{19}{6} < 3,167 \quad \text{استنتج تأطيرا للعدد } \sqrt{10} \text{ سعته } 10^{-2} \quad (4) \quad 1$$