LEMBAR JAWABAN UTS 1

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Jawaban UTS

1. a) 226 10  = 1110 00102

b) 10110112 = 8910

2. a) (a2 + 2a)(3a2 + 4a – 4 )

= 3a4 + 4a3 – 4a2 + 6a3 + 8a2 – 8a

= 3a4 + 4a3 + 6a3 – 4a2 + 8a2 – 8a

**= 3a4 + 10a3 – 4a2 – 8a**

b) (x – 2y)2 - (2x – y )2

= (x – 2y -(x – 2y )) x (2x – y+ (2x – y ))

= (x – 2y- 2x + y) x (x – 2y + 2x – y )

= (-x – y ) x (3x – 3y)

= (-x – y ) x 3 (x – y )

**= 3 (- x – y ) x (x – y )**

3. a) A = {17, 19, 21, 23, 25, 27, 29, 31, 33, 35}

B = {21, 23, 25, 27, 29, 31, 33, 35}

C = {25, 27, 31}

. 17

..

. 21 . 35

. 23 . 33 . 31

. 25 . 31

. 27 . 29

. 19 . 37

. 25 . 21

. 27

. 39

b) A B = {21, 23, 25, 27, 29, 31, 33, 35 }

. 21 . 35

. 23 . 33 . 31

. 25 . 31

. 27 . 29

. 17

. 39

. 19 . 37

C subset B

C = {25, 27, 31}

B = {21, 23, 25, 27, 29, 31, 33, 35}

**Jadi C subset B**

4. a) (F)-1  (x)

f(x) = 2x2 + 1

y = 2x2 + 1

2x2  = y – 1

X2 =

X =

f‑1 (y) =

**f-1(x) =**

b) (g O f ) (2)

(g O f ) (x) = g (f(x))

= (2x2 + 1 ) + 2

= 2x2  + 3

(g O f )(2) = 2(2)2 + 3

= 2 x 4 + 3

= **11**