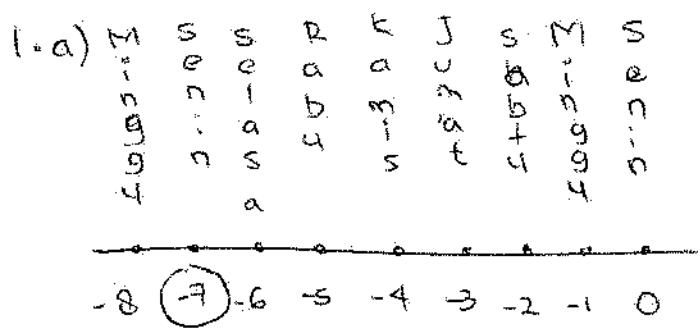


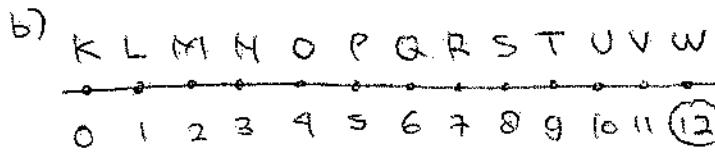
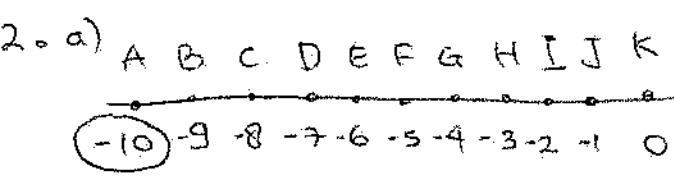
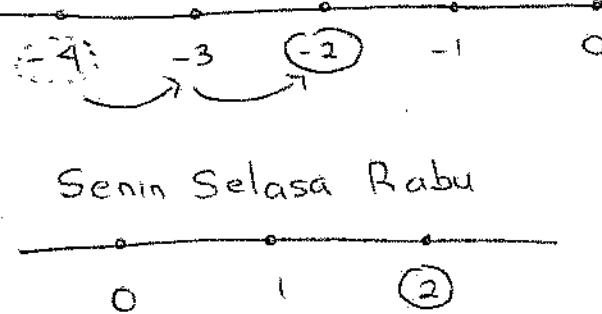
BAB 1

‐ UJI PEMAHAMAN HAL 26, 29,
31, 33, 37, LATIHAN SOAL
AKHIR BAB, URAIAN

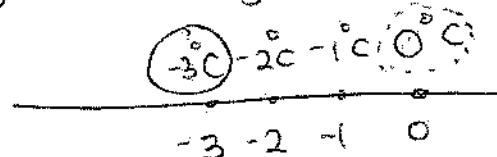
UJI PEMAHAMAN HAL 4



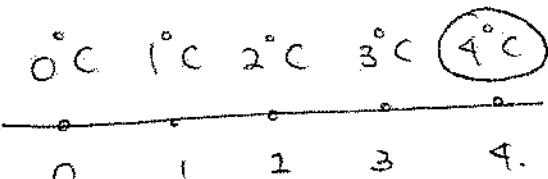
b) Kamis Jumat Sabtu Minggu Senin



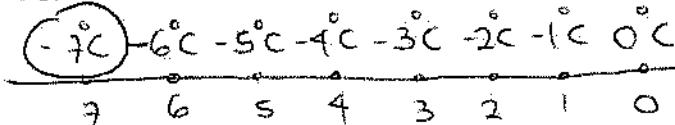
3. a) Temperatur lemari es 3°C lebih dingin dibandingkan 0°C



b) Anomali air terjadi pada saat 4°C lebih panas dari 0°C



c) Ruang pendingin 7°C lebih dingin dari 0°C .



4. a)

 35°C 36°C 37°C
 (-2) -1 0

b)

 36°C 37°C
 (-1) 0

c)

 37°C 38°C 39°C
 0 1 (2)

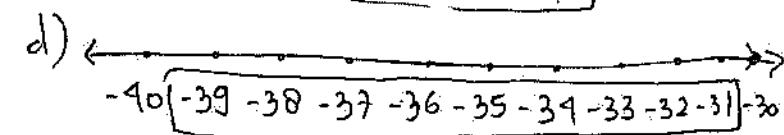
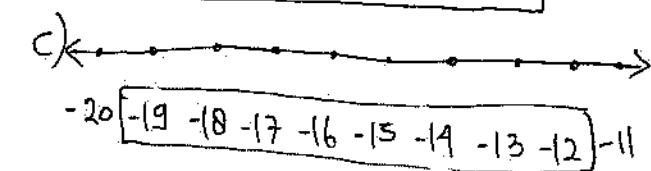
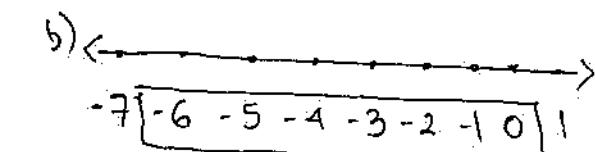
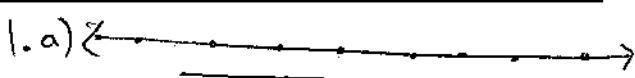
5.

13	Cianjur	
12	J7	J1
11	J6	J2
10	J5	J3
9	J4	J Bogor
8	J3	J1
7	J2	J2
6	Jakarta J1	J3
5	J5	J4
4	J4	J5
3	J3	J6
2	J2	J7
1	J1	J8
0		J9
-1		J10
-2		J11
-3		J12
-4		J13
-5		J19
-6		J15 X
-7		
-8		
-9		
-10		

- Jakarta berada di ketinggian 5
- Cianjur berada di ketinggian 12
- Bogor berada di ketinggian 8
- Kota X berada di ketinggian -7.

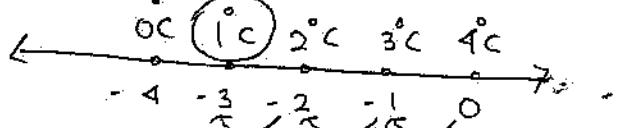
UJI PEMAHAMAN HAL 5

Halaman : 2 / 39

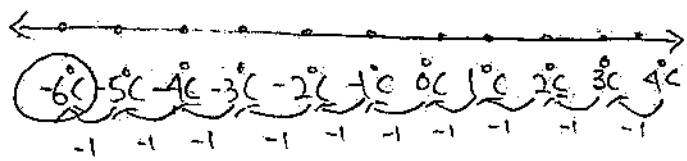


2. Hari ini 4°C dituliskan sebagai

a) Esok hari turun 3°C



b) Esok hari turun 10°C .



3. a) $\xleftarrow{\quad \quad \quad} \Rightarrow 100 > 53$

b) $\xleftarrow{\quad \quad \quad} \Rightarrow 3 > -200$

c) $\xleftarrow{\quad \quad \quad} \Rightarrow -35 > -50$

d) $\xleftarrow{\quad \quad \quad} \Rightarrow 0 > -17$

e) $\xleftarrow{\quad \quad \quad} \Rightarrow 2 > -10$

f) $\xleftarrow{\quad \quad \quad} \Rightarrow -23 > -100$

4. a) $\xleftarrow{\quad \quad \quad} \Rightarrow -3^{\circ}\text{C}$ lebih panas dari -7°C

b) $\xleftarrow{\quad \quad \quad} \Rightarrow 3^{\circ}\text{C}$ lebih panas dari -9°C

4. c) $\xleftarrow{\quad \quad \quad} \Rightarrow 0^{\circ}\text{C}$ lebih panas dari -2°C

d) $\xleftarrow{\quad \quad \quad} \Rightarrow 2^{\circ}\text{C}$ lebih panas dari -5°C

5. a) $\xleftarrow{\quad \quad \quad} \Rightarrow -4, -2, 1, 3, 5,$

b) $\xleftarrow{\quad \quad \quad} \Rightarrow -10, -8, -7, 6, 9$

c) $\xleftarrow{\quad \quad \quad} \Rightarrow -7, -3, 0, 3, 7,$

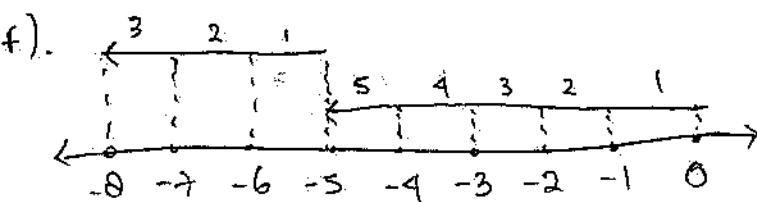
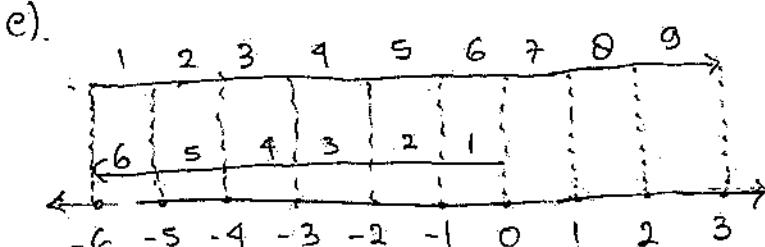
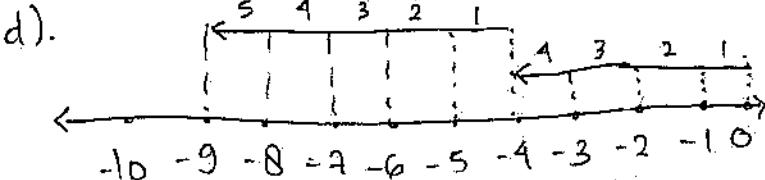
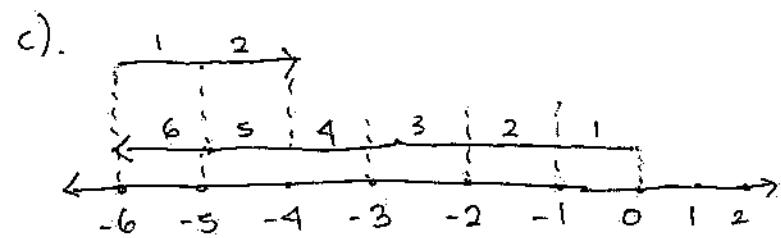
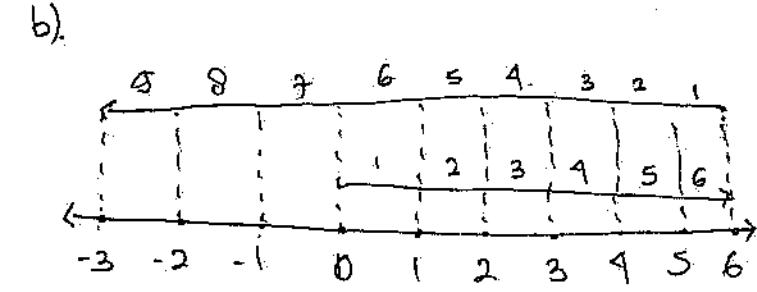
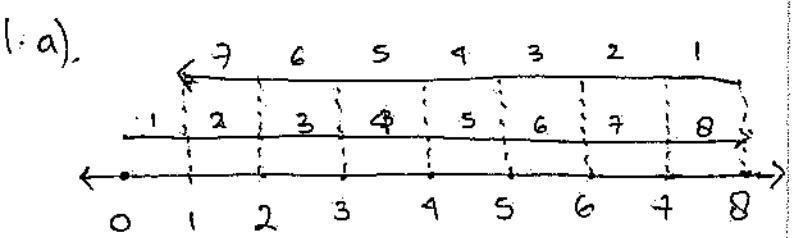
d) $\xleftarrow{\quad \quad \quad} \Rightarrow -9, -8, -1, 0, 1, 4$

e) $\xleftarrow{\quad \quad \quad} \Rightarrow -5.423, -4.523, 0, 3.423, 3.523$

$\Rightarrow -5.423, -4.523, 0, 3.423, 3.523$

UJI PEMAHAMAN HAL 8

Halaman: 3 / 34



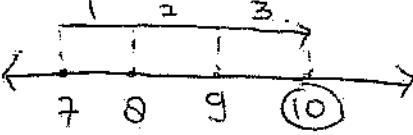
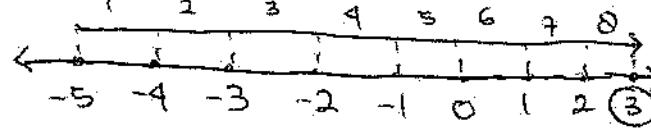
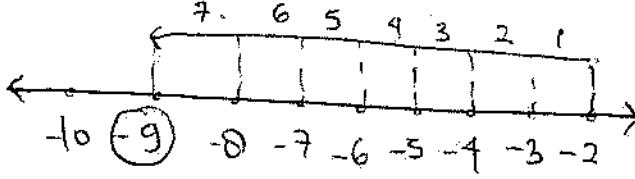
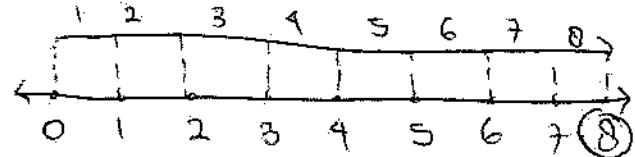
2. a) $34 + (-5) = 34 - 5 = 29$
 b) $49 + (-23) = 49 - 23 = 26$
 c) $(-75) + (-34) = -(75 + 34) = -109$
 d) $(-69) + (-45) = -(69 + 45) = -114$
3. a) $123 + (-87) = 123 - 87 = 36$
 b) $527 + (-213) = 527 - 213 = 314$
 c) $(-534) + (-278) = -(534 + 278) = -812$
 d) $(-813) + (-376) = -(813 + 376) = -1189$
4. a). $5 + 4$
 b) $(-5) + (-4)$
 c). $5 + (-3)$
 d). $(-5) + 3$
 e). $3 + (-5)$

5.

$a+b$	+	-
+	+	①
-	②	-

Untuk ① dan ② tidak bisa dipastikan tandanya. Tergantung dari besaran a dan b .

UJI PEMAHAMAN HAL 13

1. a). $2345 + (-173) = 2345 - 173 = 2.172$
- b). $(-5.342) + 567 = -(5.342 - 567) = -4.775$
- c). $(-3.572) + (-730) = -(3.572 + 730) = -4.302$
- d). $457 + (-7.202) = (-7.202) + 457$
 $= -(7.202 - 457) = -6.825$
- e). $536 + (-34) + (-536)$
 $= 536 + (-536) + (-34)$
 $= 0 + (-34) = -34.$
- f). $0 + 345 + (-345) = 0 + 0 = 0$
2. a). $7 - (-3) = 10$

- b). $(-5) - (-8) = 3$

- c). $(-2) - 7 = -9$

- d). $0 - (-8) = 8$

3. a) $a - (-b) = a + b$
b) $(-a) - (-b) = -a + b$
c) $(-a) - b = - (a + b)$
d) $0 - (-a) = a$

4. a) $45 - 37 + 23$
 $= 45 + (-37) + 23 \rightarrow B.O.P^*$
 $= 8 + 23 = 31$
- b). $(-67) + 45 - 23$
 $= (-67) + 45 + (-23) \rightarrow B.O.P^*$
 $= -67 + 22$
 $= -(67 - 22) = -45$
- c). $45 - (-57) - 83$
 $= 45 + 57 + (-83) \rightarrow B.O.P^*$
 $= 102 - 83 = 19$
- d). $(-56) - 45 - (-97)$
 $= (-56) + (-45) + 97 \rightarrow B.O.P^*$
 $= (-56) + 2 = -54$
* B.O.P = Bentuk Operasi Penjumlahan
5. a). $45 + (-37) = 45 - 37 = 8$
- b). $(-45) + 37 = -(45 - 37) = -8$
- c). $45 - (-37) = 45 + 37 = 82$.
- d). $(-45) - 37 = -(45 + 37) = -82$.
- e). $(-67) + (-29) = -(67 + 29) = -96$.
- f). $(-67) - (-29) = -(67 - 29) = -38$.
6. a) $a - b \stackrel{?}{=} b - a$, misalkan $a = 3, b = 4$
 $a - b = 3 - 4 = -1$
 $b - a = 4 - 3 = 1 \rightarrow a - b \neq b - a$
- b) $a - (b - c) \stackrel{?}{=} (a - b) - c$, misalkan $a = 4, b = 3$
dan $c = 2$
 $a - (b - c) = 4 - (3 - 2) = 4 - 1 = 3$
 $(a - b) - c = (4 - 3) - 2 = 1 - 2 = -1$
 $\therefore a - (b - c) \neq (a - b) - c$
- c). Ada, yaitu 0 itu sendiri karena jika sebuah bilangan dikurangi 0 akan kembali ke bilangan itu lagi.
Contoh: $3 - 0 = 3, 4 - 0 = 4, 5 - 0 = 5$

UJI PEMAHAMAN HAL 13

Halaman : 5 / 34

6-d). Ada, yaitu bilangan itu sendiri

$$\text{Contoh : } 3-3=0, 4-4=0, 5-5=0$$

7-a). $n+21=16$

$$n+21+(-21)=16+(-21)$$

$$n = -5$$

b). $65+n=-13$

$$65+(-65)+n=(-13)+(-65)$$

$$n = -78$$

c). $n-(-8)=17$

$$n+8=17$$

$$n+8+(-8)=17+(-8)$$

$$n = 9$$

d). $(-5)+n=7$

$$5+(-5)+n=5+7$$

$$n = 12$$

e). $n-6=-5$

$$n+(-6)=-5$$

$$n+(-6)+6=(-5)+6$$

$$n = 1$$

f). $n-53=-45$

$$n+(-53)=(-45)$$

$$n+(-53)+53=(-45)+53$$

$$n = 53-45 = 8$$

8-a)

436	197	$-$	$197+139=436$	\checkmark
$\underline{197}$	\Rightarrow			
239				

b).

500	164	$-$	$164+336=500$	\checkmark
$\underline{336}$	\Rightarrow			

c).

1702	406	$-$	$406+1316=1802$	\times
$\underline{1316}$	\Rightarrow			
1802				

9-a)

$a=5$			
	$b=-1$	$c=6$	
$d=-2$	$e=1$	5	
-7	5	-4	9

$$\Rightarrow d = -7 + 5 = -(7-5) = -2$$

$$\Rightarrow e = 5 + (-4) = 5 - 4 = 1.$$

$$\Rightarrow b = -2 + 1 = -(2-1) = -1$$

$$\Rightarrow c = 1 + 5 = 6$$

$$\Rightarrow a = -1 + 6 = 5$$

b)

-22			
	$a=2$	$b=-24$	
$c=-9$	$d=-2$	$e=-22$	
-9	13	-15	$f=-7$

$$\Rightarrow c = -9 + 13 = 13 - 9 = 4.$$

$$\Rightarrow d = 13 + (-15) = -(15-13) = -2$$

$$\Rightarrow a = 4 + (-2) = 4 - 2 = 2.$$

$$\Rightarrow b = (-22) - 2 = -(22+2) = -24.$$

$$\Rightarrow e = -24 - (-2) = -(24-2) = -22.$$

$$\Rightarrow f = -22 - (-15) = -(22-15) = -7$$

(a-a). Temperatur pukul 18.00 = 4°C .

Temperatur pukul 15.00 lebih panas

3°C dibanding pukul 18.00

$$\Rightarrow \text{Temperatur}_{\text{pukul 15.00}} = 4^{\circ}\text{C} + 3^{\circ}\text{C} = 7^{\circ}\text{C}$$

b). Temperatur pukul 12.00 lebih panas

4°C dibandingkan pukul 15.00

$$\Rightarrow \text{Temperatur}_{\text{pukul 12.00}} = 7^{\circ}\text{C} + 4^{\circ}\text{C} = 11^{\circ}\text{C}.$$

c). Temperatur pukul 09.00 lebih dingin

2°C dibandingkan pukul 12.00

$$\Rightarrow \text{Temperatur}_{\text{pukul 09.00}} = 11^{\circ}\text{C} - 2^{\circ}\text{C} = 9^{\circ}\text{C}.$$

(o.d) Temperatur pukul 06.00 lebih dingin

8°C dibandingkan pukul 09.00

\Rightarrow Temperatur

$$\text{Pukul } 06.00 = y^{\circ}\text{C} - 8^{\circ}\text{C} = 1^{\circ}\text{C}$$

e).

Waktu	06.00	09.00	12.00	15.00
Temperatur	1°C	9°C	11°C	7°C

Waktu	18.00
Temperatur	9°C

UJI PEMAHAMAN HAL 17

1. a) $5 \times (-4) = - (5 \times 4) = -20$
 b) $(-7) \times 4 = - (7 \times 4) = -28$
 c) $(-6) \times (-3) = 6 \times 3 = 18$
 d) $0 \times 7 = 0$

2. a) $(-a) \times b = - (a \times b) = -ab$
 b) $(-a) \times (-b) = a \times b = ab$
 c) $a \times (-b) = - (a \times b) = -ab$

3.

$a \times b$	+	-
+	+	-
-	-	+

4. Berat paman sekarang 85 kg

Berat paman turun 2 kg setiap minggu

- a). Berat paman lima minggu yang akan datang

$$= 85 - 2 \times 5 = 85 - 10 = 75 \text{ kg}$$

- b). Berat paman lima minggu yang lalu

$$= 85 + 2 \times 5 = 85 + 10 = 95 \text{ kg}$$

5. Total soal = 30 buah, Poin benar = 4

Poin salah = -2, Poin tidak menjawab = 0

- a). Jumlah soal benar = 25 soal

Jumlah soal salah = 3 soal.

Jumlah soal tidak dijawab = $30 - (25+3)$

$$= 30 - 28$$

$$= 2 \text{ soal}$$

$$\text{Total poin} = 25 \times 4 + 3 \times (-2) + 2 \times 0$$

$$= 100 - 6 = 94 \text{ poin}$$

* Perhatikan jumlah soal tidak dijawab tidak mempengaruhi total poin sehingga tidak perlu dicari tahu

9. b). 23 benar dan 5 salah

$$\Rightarrow \text{Total poin} = 23 \times 4 + 5 \times (-2) \\ = 92 - 10 = \\ = 82 \text{ poin}$$

c). 3 benar dan 27 salah.

$$\Rightarrow \text{Total poin} = 3 \times 4 + 27 \times (-2) \\ = 12 + (-54) \\ = - (54 - 12) = \\ = - 42$$

d). 30 salah

$$\Rightarrow \text{Total poin} = 30 \times (-2) = -60$$

UJI PEMAHAMAN HAL 20

1.a). $4 \times (-15) = - (4 \times 15) = -60$
 $(-15) \times 4 = - (15 \times 4) = -60 \rightarrow \text{sama.}$

b) $(-17) \times 11 = - (17 \times 11) = -187$
 $11 \times (-17) = -(11 \times 17) = -187 \rightarrow \text{sama.}$

c) $(-6) \times (-23) = 6 \times 23 = 138$
 $(-23) \times (-6) = 23 \times 6 = 138 \rightarrow \text{sama.}$

2.a). $(-1) \times (-1) = 1 \rightarrow \text{positif}$

b). $(-1) \times (-1) \times (-1) = -1 \rightarrow \text{negatif.}$

c) $\underbrace{(-1) \times (-1) \times (-1)}_{= (-1) \times (-1)} \times (-1) = 1 \rightarrow \text{positif.}$

d) $\underbrace{(-1) \times (-1) \times (-1) \times (-1)}_{= 1 \times (-1)} \times \underbrace{(-1) \times (-1) \times (-1)}_{= -1} = -1 \rightarrow \text{negatif.}$

3.

-2	a = -9	b = -24
c = -36	d = -12	e = -1
-6	-4	-18

$\Rightarrow (-2) \times c \times (-6) = (-6) \times (-4) \times (-18).$

$(-2) \times c = (-2) \times 2 \times (-18).$

$c = 2 \times (-18) = -36.$

$\Rightarrow (-2) \times d \times (-18) = (-6) \times (-4) \times (-18).$

$(-2) \times d = (-6) \times (-2) \times 2$

$d = (-6) \times 2 = -12$

$\Rightarrow (-36) \times (-12) \times e = (-6) \times (-4) \times (-18)$

$(-36) \times (-12) \times e = \underbrace{(-6) \times 2}_{\times \underbrace{2 \times (-1)}_{\times (-1)}} \times \underbrace{(-18)}_{\times (-1)}$

$(-36) \times (-12) \times e = (-12) \times (-36) \times (-1).$

$e = -1$

$\Rightarrow (-4) \times (-12) \times a = (-6) \times (-4) \times (-18).$

$48a = 24 \times (2) \times (-9).$

$48a = 48 \times (-9).$

$a = -9$

3. Lanjutan

$\Rightarrow (-2) \times (-9) \times b = (-6) \times (-4) \times (-18).$

$18 \times b = \overbrace{6 \times (-1)}^{\square} \times \overbrace{(-4)}^{\square} \times \overbrace{(-18)}^{\square}$

$18 \times b = (-24) \times 18$

$b = -24$

4.a) $\square \times 9 \times 8 = 72.$

$\square \times 72 = 1 \times 72.$

$\square = 1$

b) $\underbrace{7 \times \square \times 4}_{\square} = -84$

$28 \times \square = 28 \times (-3)$

$\square = -3$

c) $\underbrace{(-7) \times \square \times (-5)}_{\square} = 105$

$35 \times \square = 3 \times 35.$

$\square = 3.$

d) $5 \times (-4) \times \square = -60.$

$(-20) \times \square = (-20) \times 3.$

$\square = 3.$

e) $\underbrace{(-3) \times \square \times (-2)}_{\square} = -24.$

$6 \times \square = 6 \times (-4)$

$\square = -4$

f) $\underbrace{(-5) \times \square \times (-3)}_{\square} = 45.$

$(5 \times \square) = (5 \times 3).$

$\square = 3.$

5. Bilangan di sekitar 50: $50 + a, 50 + b,$

dimana a, b adalah bilangan bulat

$(50+a)(50+b) = 50 \times 50 + 50 \times a + 50 \times b + a \times b.$

a) $42 \times 49 = 50 \times 50 + 50 \times (-3) + 50 \times (-1) + (-2) \times (-1).$

$= 2500 + (-150) + (-50) + 2 = 2302.$

b) $48 \times 46 = 50 \times 50 + 50 \times (-2) + 50 \times (-4) + (-2) \times (-4).$
 $= 2500 + (-100) + (-200) + 8 = 2208.$

c) $52 \times 53 = 2500 + 50(2) + 50(3) + (2) \times (3)$
 $= 2500 + 100 + 150 + 6 = 2756$

d) $53 \times 48 = 2500 + 50 \times 3 + 50 \times (-2) + (3) \times (-2)$
 $= 2500 + 150 - 100 - 6 = 2544.$

UJI PEMAHAMAN HAL 22

Halaman: 9 / 34

1. a). $54 : 2 = \dots \Leftrightarrow 2 \times \dots = 54.$

$$2 \times \dots = 54$$

$$2 \times \dots = 2 \times 27.$$

$$54 : 2 = 27$$

b). $(-639) : 3 = \dots \Leftrightarrow 3 \times \dots = -639.$

$$3 \times \dots = -639.$$

$$3 \times \dots = (-213) \times 3.$$

$$(-639) : 3 = -213.$$

c). $(256 : (-3)) = \dots \Leftrightarrow (-3) \times \dots = 256.$

$$(-3) \times \dots = 256.$$

$$(-3) \times \dots = (-3) \times \left(-\frac{256}{3}\right)$$

$$256 : -3 = -\frac{256}{3} = -41 \frac{2}{3}.$$

d). $(-1.404) : (-6) = \dots \Leftrightarrow (-6) \times \dots = (-1.404)$

$$(-6) \times \dots = (-1.404).$$

$$(-6) \times \dots = (-6) \times 234.$$

$$(-1.404) : (-6) = 234$$

2. a). $(2 : \underline{\quad}) = 3.$

Diketahui: $4 \times 3 = 12.$

$$\Rightarrow 12 : \underline{4} = 3.$$

b). $36 : \dots = -4.$

Diketahui: $36 = 9 \times 4 = (-9) \times (-4).$

$$\Rightarrow 36 : \underline{(-9)} = -4$$

c). $(-221) : \dots = 17.$

Diketahui: $221 = 17 \times 13$

$$\Rightarrow -221 = (-17) \times 13 = 17 \times (-13).$$

$$\Rightarrow (-221) : \underline{(-13)} = 17.$$

d). $(-667) : \dots = -29$

Diketahui: $667 = 29 \times 23$

$$\Rightarrow -667 = (-29) \times 23.$$

$$\Rightarrow (-667) : \underline{23} = -29$$

3.

$\frac{a}{b}$	+	-
+	+	-
-	-	+
-	-	+

4. a) $\frac{72}{6} = 12$

$$b). \frac{360}{72} = \frac{360 : 6}{72 : 6} = \frac{60}{12} = \frac{60 : 6}{12 : 6} = \frac{10}{2} = 5.$$

$$c). \frac{390}{195} = \frac{390 : 5}{195 : 5} = \frac{78}{39} = \frac{78 : 39}{39 : 39} = 2.$$

$$d). \frac{3213}{6} = 535 \frac{1}{2}.$$

5. Pengurangan ketinggian 800 m permenit

$$\begin{aligned} \text{Pengurangan ketinggian} &= 800 \times 10 \\ \text{pada menit ke-10} &= 8.000 \text{ m.} \end{aligned}$$

Ketinggian awal = 10.000 m.

$$\begin{aligned} \text{Ketinggian} &= 10.000 - 8.000 \\ \text{padamenit ke-10} &= 2.000 \text{ m.} \end{aligned}$$

UJI PEMAHAMAN HAL 23

Halaman : 10 / 34

1. a). $3^3 \times 3^5 = (3 \times 3 \times 3) \times (3 \times 3 \times 3 \times 3 \times 3)$
 $= 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$
 $= 3^8$

b). $2^7 \times 2^2 = (2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2) \times (2 \times 2)$
 $= 2 \times 2$
 $= 2^9$

c). $2^5 \times 2^8 = (2 \times 2 \times 2 \times 2 \times 2) \times (2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2)$
 $= 2 \times 2$
 $\times 2 \times 2 \times 2 \times 2$
 $= 2^{13}$

d). Perhatikan bagian a), b) dan c)

$$3^3 \times 3^5 = 3^8, \text{ Dik: } 3+5=8.$$

$$2^7 \times 2^2 = 2^9, \text{ Dik: } 7+2=9.$$

$$2^5 \times 2^8 = 2^{13}, \text{ Dik: } 5+8=13$$

$$\Rightarrow 2^a \times 2^b = 2^{(a+b)}$$

2. a). $3^8 : 3^2 = \frac{3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3}{3 \times 3} = 3^6$

b). $3^7 : 3^9 = \frac{3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3}{3 \times 3 \times 3 \times 3 \times 3} = 3^3$

c). $2^5 : 3^2 = 3^2 / 9$

d). Perhatikan bagian a), b), dan c)

$$3^8 : 3^2 = 3^6, \text{ Dik: } 8-2=6.$$

$$3^7 : 3^4 = 3^3, \text{ Dik: } 7-4=3.$$

$$\Rightarrow 2^a : 2^b = 2^{(a-b)}$$

3. Dik: 2^a adalah bilangan sebut k.

$$2^a = k, \text{ Dik: } k \cdot 1 = k.$$

$$\Rightarrow \frac{2^a}{2^a} = 1 \Rightarrow 2^0 = 1 //$$

4. a). $(45 \times 40) : 72 = \frac{9 \times 5 \times 5 \times 8}{9 \times 8} = 25.$

b). $(84 \times 65) : 105 = \frac{12 \times 7 \times 8 \times 13}{21 \times 8} = \frac{3 \times 4 \times 7 \times 13}{7 \times 7} = 52.$

c). $30 \times 48 : 200 = \frac{6 \times 5 \times 8 \times 12}{10 \times 72} =$

$$= \frac{72 \times 5}{72} = 5.$$

d). $24 \times 27 : 36 = \frac{\overline{12} \times 2 \times \overline{3} \times 9}{36} = \frac{36 \times 2 \times 9}{36} = 18$

5. a). $640 : (12 \times 3) = \frac{8 \times 80}{4 \times 3 \times 3} = \frac{8 \times 2 \times 8 \times 9}{4 \times 8} = 2 \times 9 = 18$

b). $(24 \times 36) : ((12 \times 9)) = \frac{12 \times 2 \times 4 \times 9}{12 \times 8} = 8.$

c). $((160 \times 84)) : (20 \times 56) = \frac{8 \times 21 \times 4 \times 12}{4 \times 7 \times 8 \times 7} = \frac{3 \times 7 \times 4 \times 3}{4 \times 7} = 9.$

d). $(3.969 \times 1575) : (147 \times 25)$

$$= \frac{9 \times 441 \times 8 \times 315}{3 \times 49 \times 7 \times 5} = \frac{3 \times 8 \times 9 \times 441 \times 5 \times 63}{3 \times 49 \times 8} =$$

$$= 27 \times 63 = 1620 + 81 = 1701$$

1. a) $2^3 + 2^3 = 2 \times 2^3 = 2^4$

b) $2^5 + 2^5 = 2^1 \times 2^5 = 2^6$

c) $2^5 - 2^4 = 2 \times 2^4 - 2^4 = 2^4(2-1) = 2^4$

d) $3^5 - 3^4 = 3 \times 3^4 - 3^4 = 3^4(3-1) = 3^4 \times 2$.

2. a) $2^3 + 2^5 = 2^3 \times 1 + 2^3 \times 2^2$
 $= 2^3(1+2^2) = 2^3 \times (1+4)$
 $= 2^3(5) = 2^3 \times 5.$

b) $2^5 - 2^3 = 2^3 \times 2^2 - 2^3 \times 1$
 $= 2^3 \times (2^2 - 1) = 2^3(4-1)$
 $= 2^3 \times 3$

c) $3^5 + 3^2 = 3^2 \times 3^3 + 3^2 \times 1$
 $= 3^2 \times (3^3 + 1) = 3^2 \times (27+1)$
 $= 3^2 \times (28) = 3^2 \times 2^2 \times 7$

d) $3^7 - 3^6 = 3^6 \times 3 - 3^6 \times 1$
 $= 3^6 \times (3-1)$
 $= 3^6 \times 2.$

3. a) $2^3 + (2^4 \times 2^5) = 2^3 + 2^9$
 $= 2^3 \times 1 + 2^3 \times 2^6$
 $= 2^3(1+2^6) = 2^3(1+64)$
 $= 2^3(65) = 2^3 \times 5 \times 13.$

b) $3^5 + (3^2 \times 3^3) = 3^5 + 3^5 = 2 \times 3^5$

4. a) $(2^5 + 2^3) : 2^2 = (2^3 \times 2^2 + 2^3 \times 1) : 2^2$
 $= [2^3 \times (2^2 + 1)] : 2^2$
 $= \frac{2^3 \times (4+1)}{2^2} = 2 \times 5.$

b) $(2^7 - 2^4) : 2^2 = (2^4 \times 2^3 - 2^4 \times 1) : 2^2$
 $= [2^4 \times (2^3 - 1)] : 2^2$
 $= 2^2 \times (8-1) = 2^2 \times 7$

5. a) $2^7 + (2^5 \times 2^2) = 2^7 + 2^7 = 2 \times 2^7 = 2^8$

b) $2^7 - (2^5 \times 2^2) = 2^7 - 2^7 = 0$

c) $(2^7 + 2^4) : 2^3 = (2^6 \times 2 + 2^6 \times 1) : 2^3$
 $= [2^6 \times (2+1)] : 2^3$
 $= 2^3 \times 3$

d) $(2^9 - 2^4) : 2^3 = (2^4 \times 2^5 - 2^4 \times 1) : 2^3$
 $= [2^4 \times (2^5 - 1)] : 2^3$
 $= 2 \times (32-1) = 2 \times 31.$

PRAKIRAAN CUACA KOTA MOSKOW

Suhu	Siang	Malam
Selasa, 1 Februari 2022	-2°C	-5°C
Rabu, 2 Februari 2022	-3°C	-6°C
Kamis, 3 Februari 2022	-4°C	-9°C
Jumat, 4 Februari 2022	-5°C	-8°C

Kelambapan	Siang	Malam
Selasa, 1 Februari 2022	86%	88%
Rabu, 2 Februari 2022	84%	87%
Kamis, 3 Februari 2022	87%	89%
Jumat, 4 Februari 2022	84%	87%

Pertanyaan 1

Pernyataan 1: Tidak, karena yang tertera adalah siang hari lebih panas (lebih besar) dibandingkan malam hari

Pernyataan 2: Iya, Perhatikan

$$1 \text{ Februari} : -2 - (-5) = 5 - 2 = 3^{\circ}\text{C}$$

$$2 \text{ Februari} : -3 - (-6) = 6 - 3 = 3^{\circ}\text{C}$$

$$\text{terbesar} \rightarrow 3 \text{ Februari} : -4 - (-9) = 9 - 4 = 5^{\circ}\text{C}$$

$$4 \text{ Februari} : -5 - (-8) = 8 - 5 = 3^{\circ}\text{C}$$

Pernyataan 3: iya. Perhatikan di atas

Pernyataan 4: tidak, karena suhu pada tanggal 4 Februari 2022 waktu malam hari adalah -8°C yang lebih hangat dibandingkan suhu pada tanggal 3 Februari 2022 waktu malam hari sebesar -9°C .

Pertanyaan 2

Pernyataan 1: iya. Perhatikan ↓.

$$1 \text{ Februari} : 88\% - 86\% = 2\% \leftarrow \text{ada}^*$$

$$2 \text{ Februari} : 87\% - 84\% = 3\% \leftarrow \text{ada}^*$$

$$3 \text{ Februari} : 89\% - 87\% = 2\% \leftarrow \text{ada}^*$$

$$4 \text{ Februari} : 87\% - 84\% = 3\% \leftarrow \text{ada}^*$$

* ada kalau selisih kelembapannya tidak sama dengan nol

Pernyataan 2: iya. Perhatikan ↑.

Pernyataan 3: iya, karena suhu pada siang hari lebih hangat dibandingkan malam hari dan perubahan suhunya sebesar 3°C

Pernyataan 4: tidak, karena selisih suhu terbesar adalah 5°C

Pertanyaan 3

Pernyataan 1: Selisih suhu malam hari 3 Februari dan 4 Februari
 $\Rightarrow -8 - (-5) = 5 - 8 = -3^{\circ}\text{C}$.

Pernyataan 2: Selisih suhu malam hari 2 Februari dan 3 Februari
 $\Rightarrow -9 - (-6) = -(9 - 6) = -3^{\circ}\text{C}$.

Pernyataan 3: Penurunan suhu pada 4 Februari

$$\Rightarrow (-5) - (-8) = 8 - 5 = 3^{\circ}\text{C}$$

Pernyataan 4: Penurunan suhu tertinggi ada pada 3 Februari yaitu 5°C .