

Integers

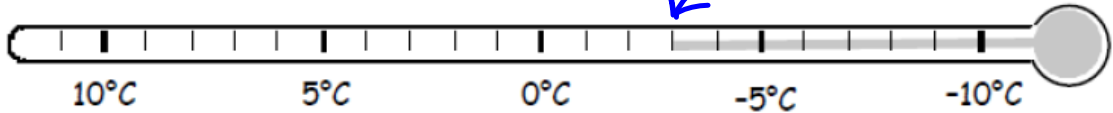
1)

What temperatures are showing on the following thermometers?

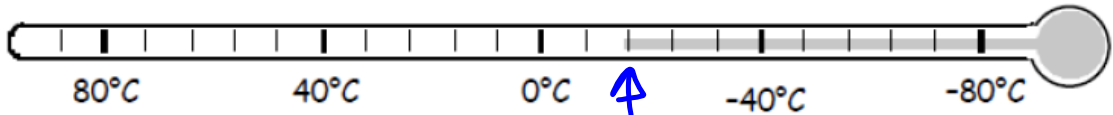


-3°C

(a)



(b)



-16°C

- (a) Jason had £50 in his bank account. He then withdrew £80.
What will the balance be on his account now ?

$$50 - 80$$
$$= -\pounds 30$$

(b) On Monday, Mary had a bank balance of -£145.

On Tuesday, she withdrew £35.

On Wednesday she paid £50 into her account.

How much must she deposit on Thursday to clear her overdraft?

$$\text{Tues} \quad -145 - 35 = -£180$$

$$\text{Wed} \quad -180 + 50 = -£130$$

$$\text{Thurs} \quad £130$$

(c) Maximus Tritus was born in 42 B.C. and died 15 A.D. How old was he when he died ?

$$42 + 15$$
$$= 57$$

- (d) The temperature last night was -5°C . This morning it has risen by 9°C .
What is the temperature this morning?

$$-5 + 9 = 4^{\circ}\text{C}$$

2)

Calculate :-

(a) $9 - 3$

$$= 6$$

(b) $4 - 6$

$$= -2$$

(c) $7 - 12$

$$= -5$$

(d) $13 - 25$

$$= -12$$

$(e) (-5) + 10$

$= 5$

$(f) (-2) + 9$

$= 7$

$(g) (-1) - 2$

$= -3$

$(h) (-5) - 7$

$= -12$

$$(i) 6 + (-1)$$

$$= 6 - 1$$

$$= 5$$

$$(j) 3 + (-1)$$

$$= 3 - 1$$

$$= 2$$

$$(k) 18 + (-12)$$

$$= 18 - 12$$

$$= 6$$

$$(l) 19 - (-1)$$

$$= 19 + 1$$

$$= 20$$

$(m) 15 - (-25)$

$= 15 + 25$

$= 40$

$(n) 10 - (-43)$

$= 10 + 43$

$= 53$

$(o) (-71) - 19$

$= -90$

$(p) (-3) + (-2)$

$= -3 - 2$

$= -5$

$(q) \quad (-7) + (-12)$

$= -7 - 12$

$= -19$

$(r) \quad (-10) - (-10)$

$= -10 + 10$

$= 0$

$(s) \quad (-43) - (-12)$

$= -43 + 12$

$= -31$

$(t) \quad (-0.6) - (-0.4)$

$= -0.6 + 0.4$

$= -0.2$

3)

Write down each of the following and find the answers :-

(a) $3 \times (-4)$

$= -12$

(b) $6 \times (-7)$

$= -42$

(c) $(-5) \times 8$

$= -40$

(d) $(-36) \div 9$

$= -4$

$(e) (-56) \div 7$

$= -8$

$(f) (-24) \div 12$

$= -2$

$(g) (3 \times 8) \div 2$

$= 24 \div 2$

$= 12$

$(h) (8 \times 8) \div 4$

$= 64 \div 4$

$= 16$

$$(i) 10 \times (10 - 15) \quad (j) 9 \times (10 - 19) \quad (k) ((-4) - 11) \div 3 \quad (l) (-6) \times (-3)$$

$$\begin{aligned} &= 10 \times (-5) &= 9 \times (-9) &= -15 \div 3 &= 18 \\ &= -50 &= -81 &= -5 & \end{aligned}$$

$(m) (-33) \times (-1)$

$= 33$

$(n) (-56) \div (-4)$

$= 14$

$(o) 2 \times (-3) \times (-4)$

$= 2 \times 12$

$= 24$

$(p) ((-10) + (-2)) \div (-3)$

$= -12 \div (-3)$

$= 4$

$$(q) (-2)^2$$

$$= -2 \times (-2) \\ = 4$$

$$(r) (-3)^3$$

$$= -3 \times (-3) \times (-3) \\ = 9 \times (-3) \\ = -27$$

$$(s) (-1) \times (-2) \times (-3) \times (-2) \times (-1)$$

$$= 2 \times (-3) \times (-2) \times (-1) \\ = -6 \times (-2) \times (-1) \\ = 12 \times (-1) \\ = -12$$