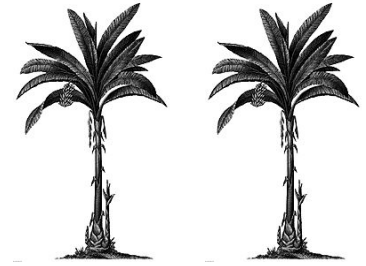


Positive / Negative Integers

1. Carry out the following additions or subtractions

- (a) $-2 + 5$ (b) $-4 - 7$ (c) $12 - 17$ (d) $-6 + 18$ (e) $-5 - 5$
(f) $-3 + 17$ (g) $12 - 22$ (h) $10 - 23$ (i) $-2 + 17$ (j) $-20 + 50$
(k) $6 + (-5)$ (l) $-4 + (-2)$ (m) $-10 + (-60)$ (n) $-14 - 34$ (o) $-6 - 24$
(p) $-12 + (-12)$ (q) $-16 + (-22)$ (r) $-4 + 3 - 6$ (s) $-12 + 10 + 5 - 11$

2. (a) At an oasis in the desert the temperature was recorded at 34°C at midday. By midnight the temperature had fallen to -3°C .
By how many degrees had the temperature fallen between midday and midnight?



- (b) By 4a.m. the temperature had fallen by another 4°C .
What was the temperature at 4a.m.?

3. (a) In January the average daily temperatures in Australia and Antarctica are

Australia 28°C
Antarctica -3°C

What is the difference between these temperatures?

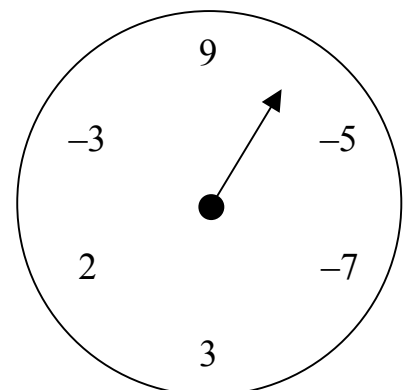
- (b) By August the average daily temperature in Antarctica has fallen by 25°C .
What is the average daily temperature in Antarctica in August?

4. In the country of Lithuania the average temperature varies greatly between summer and winter.

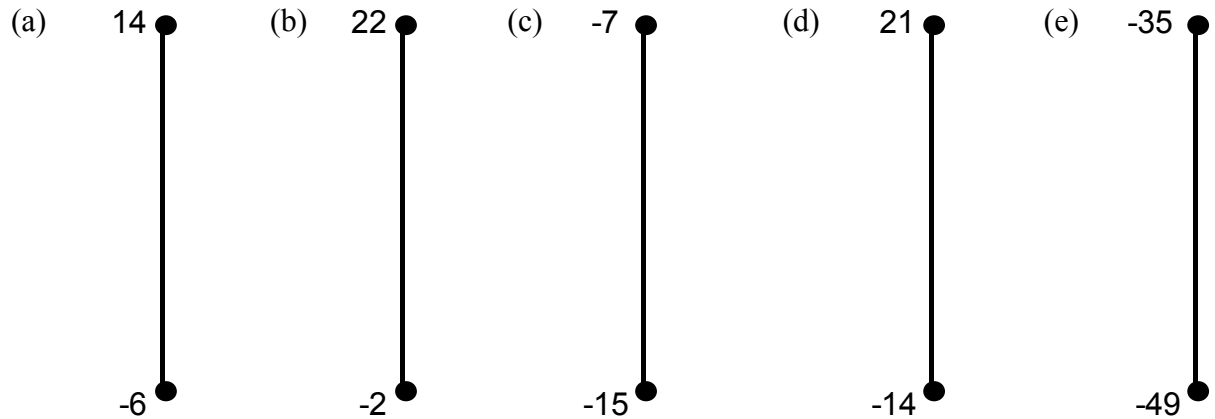
The average summer temperature is $52^{\circ}\text{Fahrenheit}$ and the average winter temperature is $-15^{\circ}\text{Fahrenheit}$.

Calculate the difference between the average summer and winter temperatures.

5. The diagram shows a spinner. The arrow is spun round to land on one of the numbers shown.
Find **3** numbers the arrow could land on which would add up to 4.



6. The diagrams below show a series of number lines. Write down how far apart each pair of numbers is.

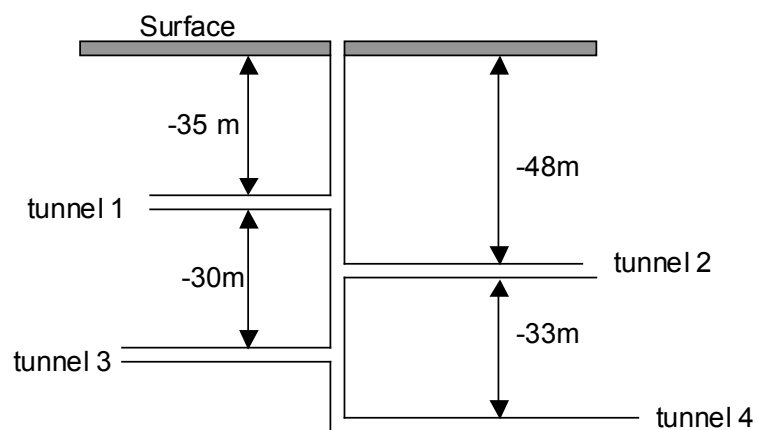


7. The table below shows the temperatures at 10am in 5 different cities.

City	Temperature(°C)
London	- 7
New York	- 13
Anchorage	- 24
Cairo	42
Capetown	26

- (a) What is the difference between the temperatures in Capetown and London?
- (b) What is the difference in temperatures between New York and Cairo?
- (c) By midnight the temperature in Anchorage had fallen by 14°C , what was the temperature in Anchorage at midnight?

8. The diagram opposite shows tunnels in a mine and how far below the surface they are.



- (a) How far below the surface is tunnel 3?
- (b) How much further down is tunnel 2 than tunnel 1?
- (c) Tunnel 5 is to be dug 18 m below Tunnel 3. How deep will tunnel 5 be below the surface?

9. Neil, Jim and Sarah are playing a game where they draw four cards. Their score is found by adding the numbers on their cards.

Neil	-6	4	-9	-1
Jim	3	-7	8	-5
Sarah	-8	-2	9	3

- (a) Find Neil's total score.
 (b) The winner of the game is the person with the highest score. Who wins the game?

10. In a computer game points are given or taken away for hitting different symbols. The points are shown below for each symbol.



5 points

8 points

-10 points

-6 points

2 points

Work out the total score for hitting the following symbols.

- (a)
- (b)
- (c)
- (d)

11. Carry out the following multiplications or divisions

- (a) -2×5 (b) -6×-6 (c) $12 \div -4$ (d) $-30 \div 6$ (e) -8^2
 (f) $-10 \times (-2)$ (g) $60 \div (-10)$ (h) -5^2 (i) $35 \div -7$ (j) $-12 \times (-3)$
 (k) $(-40) \div (-8)$ (l) -2^3 (m) $-54 \div -9$ (n) -6×-2 (o) -50×-3
 (p) $-5 \times 9 \times -2$ (q) $-16 \div 4 \times -3$ (r) $-20 \times -2 \div (-8)$

12. Use the values in question 10 to work out

- (a) \times \times
- (b) \times \div