1. Father told his son, "I am four times as old as you".

His son is 12 years old. After how many years will the father be 3 times as old as his son?
A. 2
B. 4
C. 6
D. 8

## Answer: (C)

Age of his son $=12$ years
Age of father $=12 \times 4=48$ years
Let after $x$ years father will be 3 times as old as his son.
Then, $48+x=3(12+x)$
$\rightarrow 48+x=36+3 x$
$\rightarrow 3 x-x=48-36=12$
$\rightarrow 2 \mathrm{x}=12$
$\rightarrow x=6$

So, the correct answer is C 6 .
2.

| TRAIN TIMETABLE |  |  |  |
| :---: | :---: | :---: | :---: |
| North Sydney | $07: 12$ | $07: 19$ | $07: 27$ |
| Milsons Point | $07: 14$ | $07: 21$ | $07: 29$ |
| Wynyard | $07: 18$ | $07: 25$ | $07: 33$ |
| Town Hall | $07: 22$ | $07: 29$ | $07: 37$ |
| Central | $07: 26$ | $07: 33$ | $07: 41$ |

What is the timetable of the latest train Richard can catch at Milsons Point to get to Town Hall by $7: 40 \mathrm{am}$ ?
A. $7: 18 \mathrm{am}$
B. $7: 25 \mathrm{am}$
C. $7: 27 \mathrm{am}$
D. 7:29 am

## Answer: (D)

Richard can catch the train at Milsons Point at 7:29 am to get to Town Hall by 7:37 am (within 7:40 am).

| TRAIN TIMETABLE |  |  |  |
| :---: | :---: | :---: | :---: |
| North Sydney | $07: 12$ | $07: 19$ | $07: 27$ |
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So, the correct answer is D 7:29 am.
3.


The distance between the points $A$ and $B$ is:
A. 1000
B. 1200
C. 1400
D. 1500

## Answer: (A)

Difference between 2500 and $1500=2500-1500=1000$
Difference of each of the small dots on the number line from 1500 to 2500 represents $=$ $1000 \div 5=200$
Therefore, the value of $A$ is $=1500+400=1900$ and the value of $B$ is $=2500+400=2900$

So, the distance between points $A$ and $B$ is $=2900-1900=1000$.


So, the correct answer is $\mathbf{A} 1000$.
4. © represents a number.

$$
3 \times(\mathbf{\Delta}-1)+7=64
$$

What is the value of $\boldsymbol{\Delta}$ ?
A. 10
B. 15
C. 20
D. 25

Answer: (C)

$$
\begin{aligned}
& 3 \times(\boldsymbol{\Delta}-1)+7=64 \\
\Rightarrow & 3 \times(\boldsymbol{\Delta}-1)=64-7=57 \\
\Rightarrow & (\boldsymbol{\Delta}-1)=57 \div 3=19 \\
\Rightarrow & \boldsymbol{\Delta}=19+1=20
\end{aligned}
$$

Therefore, the value of $\boldsymbol{\Delta}=20$
So, the correct answer is C 20.
5. A farmer kept some cows and hens on his property.

If the number of legs is 18 , more than twice the number of heads, this means that the number of cows is:
A. 7
B. 9
C. 11
D. 13

## Answer: (B)

Let the number of cows is $x$ and the number of hens is $y$.
Then, $4 \mathrm{x}+2 \mathrm{y}=2(\mathrm{x}+\mathrm{y})+18$
$\rightarrow 4 \mathrm{x}+2 \mathrm{y}=2 \mathrm{x}+2 \mathrm{y}+18$
$\rightarrow 4 \mathrm{x}+2 \mathrm{y}-2 \mathrm{x}-2 \mathrm{y}=18$
$\rightarrow 2 \mathrm{x}=18$
$\rightarrow x=9$
Therefore, the number of cows is 9 .
So, the correct answer is B 9.

