Solutions

Mock Test 1

1 C

$$12 \times 11 - (12 + 11) = 109$$

2 B

$$53{,}59$$

3 C

$$2 \times 3^2 \times 5 \times \_\_\_\_\_ = 2160$$
$$=> 3^2 \times \_\_\_\_\_ = 216$$
$$Answer = 216 \div 9 = 24$$

4 D

$$\frac{1}{5} - \frac{1}{10} = \frac{1}{10} = 0.1$$

5 A

$$110° => 55\ ordes$$
$$1° => \frac{1}{2}\ order$$
$$360° => 180\ orders$$

6 *D*

$$4.29 \div 12 = 0.357 = 36p$$

7 *D*

$\frac{1}{5}$ is 8, 32% is $30\% + 2\% = 12 + 0.8 = 12.8$

$$40 - 8 - 12.8 = 19.2$$

8 B

$$11250 \div 25 = 450$$

9 C

Check each one of them

10 C

11 C

Manchester and Birmingham	$\sim 5.5\ million\ (28 + 27)$
Birmingham and Leeds	$\sim 4.6\ million\ (19 + 27)$
Leeds and Glasgow	$\sim 3.6\ million\ (19 + 17)$
Manchester and Glasgow	$\sim 4.5\ million\ (28 + 17)$
Leeds and Manchester	$\sim 4.7\ million\ (28 + 19)$

12 E

$$2\frac{3}{8} + 3\frac{1}{12} - \frac{1}{4} = 5\frac{11}{24} - \frac{1}{4} = 5\frac{5}{24}$$

13 B

14 *A*

$100km$ in 3600 sec

$1km$ in $36sec$

$1000m$ in $36sec$

$200m$ in $36 \div 5 = 7.2sec$

15 C

$$\frac{x+z}{y} + y = \frac{40}{20} + 20 = 2 + 20 = 22$$

16 A

x cycles and y cars

$$x + y = 40$$
$$2x + 4y = 140$$
$$x = 10$$

17 *C*

$$2025 - 1712 = 313$$

18 A

Total money required $= 40000 + 20000 = 60000$

Tickets: $60000 \div 3 = 20000$

19 E

Total time $= 1\ hour + 150\ min = 3\ hours\ 30min = 18 \times 3 + 9 = £63$

20 C

$$1:200000 => 24:4800000cm$$
$$= 48000m = 48km$$
$$Cost = 48 \times 3 = 144$$

21 B

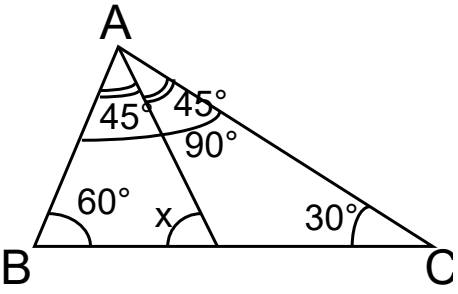
$Adult - x, Kid - y$

$$2x + 3y = 66$$
$$3x + 2y = 74$$
$$6x + 9y = 198$$
$$6x + 4y = 148$$
$$5y = 50$$
$$y = 10$$

22 E

Consider triangle ABC. Angle A is 90°. So, the equal angles are each 45°

$$x = 180° - 45° - 60° = 75°$$



23 B

Time taken to cover $6km$:

$$15km \rightarrow 60min$$
$$1km \rightarrow 4min$$
$$6km \rightarrow 24min$$
$$8:20AM - 24min = 7:56AM$$

24 A

A $4 \times 4 \times 4$ cube will have a $2 \times 2 \times 2$ cube in the centre which will have no faces exposed to outside.

Answer $= 2 \times 2 \times 2 = 8$

25 D

$$150 \times 18 = 2700cm = 27m$$

26 *D*

Flight starts at $15:15$
Reaches Stockholm at $17:50$
Time at Stockholm $18:50$

27 E
Calculate speed of each car $per\ minute$ or $per\ hour$ and compare

28 C
$$\frac{200000-150000}{150000}=\frac{1}{3}=33.33\%$$

29 A
$$\frac{37500+75000+150000}{3}=87500$$

30 D
Add total sold $=21000$
Add total made $=24000$
Unsold $=24000-21000=3000$

31 A
Dimensions of the outer rectangle are $10inch$ and $12\ inch$. Area $=10\times12=120$

32 C
$$45\times15=675km$$

33 B
10 men $=>$ 20 days
$Total\ work\ is$ 200
$$So, 200\div8=25$$

34 B
Total days $=31+28+31+30+31+27=178$
Complete weeks $=178\div7=25.something=25$

35 A
$$350\rightarrow1400$$
$$1\rightarrow$$
$$1400\div350=4$$

36 E
$$2.713-2.013=0.7m=70cm$$

37 D
$32.5\times12=390$

38 C
Temperature fall in next 20 days $=0.5\times20=10℃$

39 A
10 cube boxes will have $12\times6\times10=720$ cans
Total drink $=720\times300=216000ml$
$$=216l=215000cm^3$$

40 A
Total cost for a week's stock: $1.25\times5\times7=£43.75$
Change $=50-43.75=£6.25$

41 B
$$2025-1990-1=34$$
As we are still in June and his birthday is in Sep we need to subtract 1

42 A
$A\rightarrow$ In a triangle the sum of any two sides should be greater than the third side

43 C
Total number of boys $=3300$
Average $=3300\div5=660$

44 D
4 out of 5 schools

45 D
$2950\div6250=47.2\%=\sim50\%$ (50% is the closest value)