

Letymer Upper 2020 S2 MS

Section A

1. C: 69977
2. A: 3648
3. C: 8
4. A: 4
5. A: 5
6. D: 35
7. A
8. B
9. C
10. E
11. C
12. A
13. B
14. C
15. E
16. B
17. D
18. B
19. D
20. D

24 a)

1st	2nd	3rd
3	2	1
2	2	2
4	1	1

b)

1st	2nd	3rd	4th
3	2	2	1
2	2	2	2
4	2	1	1
4	2	2	1
2	3	2	1
2	4	1	1
3	3	1	1
5	1	1	1

Section B

- 21 a) 652
- b) -58
- c) 73
- 22 a) 17 girls
- b) 12 girls (16 boys)
- c) $\frac{5}{27}$
- 23 a) 6 min 24 seconds
- b) 2 min 24 seconds (LCM = 144 sec)

- 25 a) 8
b) $x = -2$
c) ~~#~~ $x = 14$

26 ~~70cm~~ 70cm

27 a) 4 black tiles ; 2 white tiles

b) 42 black ~~4~~ (36 white)

$$\begin{aligned} \text{c) } & \frac{420 \text{ tiles}}{2} \quad (20 \times 21) \\ & = 210 \text{ tiles} \end{aligned}$$

28. a) 62

b) 500, 304, 403, 340, ~~430~~ ...

c) 14 is not the sum of any two square numbers

(1, 4, 9)

$$x = 1$$

$$y = 1$$

(29)

a)

	Big Ear	Small Ear	Total
Green	$2x$ (<u>2</u>)	$2x$ (<u>2</u>)	$4x$ (<u>4</u>)
Pink	x (<u>1</u>)	2 (<u>2</u>)	$3y$ (<u>3</u>)
Blue	0	1 (<u>1</u>)	y (<u>1</u>)
Total	<u>3</u>	<u>5</u>	<u>8</u>

b)

- 1 small-eared green
- 2 big-eared greens
- 2 big-eared blues
- 3 big-eared pinks