KS3 Higher Week 7 answers

1, a, $\frac{2}{3} + \frac{1}{5} \Rightarrow \frac{10}{15} + \frac{3}{15} = \frac{13}{15}$ b, $\frac{5}{18}$ c, $\frac{1}{6}$ d, $\frac{8}{7} \Rightarrow 1\frac{1}{7}$

2, a, $\frac{1}{2}$ b, $\frac{2}{3}$ c, $\frac{2}{3}$ d, $\frac{3}{4}$ e, $\frac{2}{5}$ f, $\frac{3}{7}$

3, a, 1:2 b, 2:5 c, 1:6 d, 1:2 e, 1:3 f, 4:5

g, 4:3 h, 8:3 i, 2:4:5 j, 3:4:10 k, 1:4 l, 2:3

4, a, 1:3 b, 1:4 c, 1:3 d, 1:3·5 e, 1 : $\frac{1}{2}$ or 0.5 f, 1 : $\frac{1}{4}$

5, a, 18 b, 24 c, 21 d, 84 e, 210

6, a, 1 : 2 (1/3 : 2/3) £18 ÷ 3 = £6 b, £5 : £15 c, £6 : £9 d, £9 : £18

£6 : £12 e, £30 : £90 f, £14 : £21 g, £18 : £24

h, £65 : £39 i, £320 : £480 j, £320 : £400 k, £12 : £18 : £24

l, £8 : £24 : £56

7, M R (7 : 8) (7/15 : 8/15) £120 ÷ 15 = £8

Mark gets 7 × £8 = £56

Ria gets 8 × £8 = £64

8, T : M (2 : 3) ×9 (18 : 27)

Mersie gets 27 sweets

9, a, B : Y 2 : 5 350ml ÷ 7 = 50ml

He will need 50×2 100ml of Blue

50×5 250ml of Yellow

b, B : Y 2 : 5 ×200 (400 : 1000ml) 1L = 1000ml

He will need 400ml of Blue paint

10. 3 : 2 : 1 180 ÷ 6 = 30°

90° : 60° : 30°

11/ A : B
4 : 1

$85 \div 5 = 17$

Angela gets 4×17 £68
Ben gets £17

12/ G B 3/8 girls so 5/8 boys

$\times 4 \begin{pmatrix} 3 & : & 5 \\ 12 & & 20 \end{pmatrix} \times 4$ ∴ 20 boys 12 + 20 = 32 students in total

13/ 5 CD = £3.50 b/ 2 CDs = £1.40 c/ 7 CDs = £4.90
c/ 1 CD = ~~70p~~ d/ 12 CDs = £8.40

14/ 8 Books = £24 B/ 4 books = £12 c/ 10 books = £30
1 Book = £3 d/ 25 books = £75

15/ 5 hrs = £45 c/∴ 3 hours = £27
1 hr = £9 b/ 5 days × 8 hrs = 40 hrs $9 \times 40 =$ £360

16/ 10 cakes = 2½ × original recipe

Flour $240 \times 2 = 480 + 120 = 600g$
Sugar $80 \times 2.5 = 200g$
Eggs = 5 eggs

17/ a/ ÷2 (8 men – 10 hrs
4 men = 20 hrs) ×2 INVERSE

b/ ×5 (8 men – 10 hrs
40 men 2 hrs) ÷5

c/ ÷8 (8 men – 10 hrs
1 men – 80 hrs) ×8

18/ a/ ÷2 (10 machines = 2000 cupcakes = 1 hour
5 machines = 2000 cupcakes = 2 hours) ×2 INVERSE

b/ ×5 (10 machines = 1 hr = 2000 cupcakes
50 machines 1 hr = 10000 cupcakes) ×5 DIRECT