

# Zyger week 2 answers

1, a, 24    b, 60    c, 140    d, 28    e, 0.6

2,  $3/4 = 15/20$      $5/6 = 30/36$      $3/7 = 12/28$      $2/5 = 6/15$      $2/9 = 10/45$

3, a,  $2/3 > 4/7$     b,  $2/5 > 1/3$     c,  $5/8 > 3/5$     d,  $3/4 > 7/10$

4, a,  $13/5$     b,  $21/3$     c,  $21/6$     d,  $33/4$     e,  $43/7$

5, a,  $4/3$     b,  $5/2$     c,  $13/5$     d,  $29/8$     e,  $57/11$

6, a,  $15/20 + 16/20 = 31/20 = 1\frac{11}{20}$     b,  $28/36 - 27/36 = \frac{1}{36}$

c,  $5/3 + 19/8 = \frac{40}{24} + \frac{57}{24} = \frac{97}{24} = 4\frac{1}{24}$

d,  $18/7 - 5/4 = \frac{72}{28} - \frac{35}{28} = \frac{37}{28} = 1\frac{9}{28}$

7,  $1\frac{5}{6} + \frac{1}{3} + 2\frac{1}{4} = \frac{11}{6} + \frac{1}{3} + \frac{9}{4} = \frac{22}{12} + \frac{4}{12} + \frac{27}{12} = \frac{53}{12}$

$= 4\frac{5}{12}$  of an hour  $\Rightarrow$  4 hours 25 minutes

$\frac{1}{12} = 5 \text{ min}$

8, a,  $2\frac{1}{3} \times \frac{5}{8} = \frac{5}{2}$     b,  $\frac{8}{4} \times \frac{21}{5} = \frac{1}{2}$     c,  $\frac{5}{3} \times \frac{8}{5} = \frac{8}{3} = 2\frac{2}{3}$

d,  $17\frac{1}{2} \times \frac{21}{5} = \frac{51}{5} = 10\frac{1}{5}$     e,  $2\frac{2}{3} \times \frac{4}{1} = \frac{8}{3} = 2\frac{2}{3}$     f,  $\frac{7}{4} \times \frac{3}{2} = \frac{21}{8} = 2\frac{5}{8}$

g,  $\frac{4}{8} \times \frac{4}{4} = \frac{1}{2}$     h,  $\frac{9}{4} \times \frac{2}{7} = \frac{9}{14}$

9, a,  $8\frac{1}{1} \times \frac{1}{4} = 2$     b,  $\frac{9^3}{1} \times \frac{8}{8} = 24$     c,  $\frac{8}{1} \times \frac{4}{1} = 32$     d,  $\frac{5}{1} \times \frac{3}{2} = 15$

e,  $5/6 \times \frac{1}{2} = 5/12$

10,  $3/5$  eaten so Harry has  $2/5$  left,  $2/5$  of  $1/3 = \frac{2}{5} \times \frac{1}{3} = \frac{2}{15}$  left

11,  $2\frac{1}{4} \times 7 = \frac{9}{4} \times 7 = 6\frac{3}{4} = 15\frac{3}{4}$  litres drunk

$$15\frac{3}{4} \div 1\frac{1}{2} \Rightarrow 6\frac{3}{4} \div \frac{3}{2} = \frac{6\frac{3}{4}}{1} \times \frac{2}{3} = 2\frac{1}{2} = 10\frac{1}{2}$$

10½ bottles drunk

12,  $2\frac{1}{2}$  left

$\frac{2}{7} = 8$  sweets

$\frac{1}{7} = 4$  sweets

whole amount = 28 sweets

13, a,  $\frac{1}{8}$

b,  $\frac{3}{2} = 1\frac{1}{2}$

c, reciprocal of  $1\frac{3}{4}$   
 $= \frac{4}{7}$

d, rec of  $1\frac{1}{4}$   
 $= \frac{4}{5}$

e,  $\frac{8}{3}$

14, Actually show each step of workings (you can use a calculator to help with the steps)

$$10\frac{1}{7} + \frac{29}{11} = \frac{110}{77} + \frac{203}{77} = \frac{313}{77} = 4\frac{5}{77}$$

15,  $\frac{7}{4} \div \frac{14}{5} = \frac{7}{4} \times \frac{5}{14} = \frac{5}{8}$

16, a,  $5\frac{7}{88}$

b,  $1\frac{4}{15}$

c, 26

d,  $1\frac{1}{5}$

17,  $\frac{1}{3} + \frac{2}{5} = \frac{5}{15} + \frac{6}{15} = \frac{11}{15} \therefore \frac{4}{15}$  are black

$\frac{4}{15} = 20$

$\frac{1}{15} = 5$

$15 \times 5 = 75$

In total 75 cars

18, a, 6

b, 700

c, 236

d, 823.4

e, 6.7

f, 0.58

g, 7

h, 0.06

i, 9.7

j, 0.1825

k, 4.75

l, 4.7