

# KS3 Higher WK 5 answers

1, a,  $\frac{2}{20} \rightarrow \frac{1}{10}$     b,  $\frac{12}{30} \rightarrow \frac{2}{5}$     c,  $\frac{3}{14}$     d,  $\frac{7}{33}$     e,  $\frac{2}{6} = \frac{1}{3}$

2,  $\frac{1}{6} \times \frac{4}{1} = \frac{4}{6} = \frac{2}{3}$     g,  $\frac{2}{3}$     h,  $\frac{11}{14}$     i,  $\frac{3}{8}$     j,  $\frac{5}{44}$

2, Example  $4\frac{1}{3} \times \frac{6^2}{5} = \frac{8}{5} = 1\frac{3}{5}$     a,  $\frac{5}{4} \times \frac{7}{8} = \frac{7}{4} = 1\frac{3}{4}$

b,  $8\frac{1}{2} \times \frac{11}{10} = \frac{11}{4} = 2\frac{3}{4}$     c,  $10\frac{1}{4} \times \frac{14^2}{9} = \frac{20}{9} = 2\frac{2}{9}$

3, Example  $\frac{6}{5} \div \frac{3}{2} \rightarrow \frac{6}{5} \times \frac{2}{3} = \frac{4}{5}$

a,  $\frac{3}{2} \div \frac{4}{3} = \frac{3}{2} \times \frac{3}{4} = \frac{9}{8} = 1\frac{1}{8}$     b,  $8\frac{2}{7} \times \frac{3}{4} = \frac{6}{7}$

c,  $\frac{11}{4} \times \frac{6}{11} = \frac{6}{4} = 1\frac{1}{2}$

4,  $3\frac{1}{5} \times \frac{1}{6} = \frac{1}{10}$  are hardback Fiction

5,  $\frac{7}{8} \times \frac{1}{8} = \frac{1}{8}$  are plain with fruit centres

6, a,  $3\frac{3}{12} + \frac{8}{12} = 1\frac{1}{2}$     b,  $1\frac{1}{28}$     c,  $19\frac{1}{30}$     d,  $1\frac{1}{30}$

7, a, 0.81    b, 0.34    c, 0.3    d, 0.07    e, 0.025

8, a, 45%    b, 76%    c, 90%    d, 6%    e, 12.5%

9, a,  $\frac{56}{100} \rightarrow \frac{14}{25}$     b,  $\frac{24}{100} \rightarrow \frac{6}{25}$     c,  $\frac{2}{10} \rightarrow \frac{1}{5}$     d,  $\frac{3}{10}$     e,  $\frac{3}{8}$

10, a, 0.3, 30%    b, 0.07, 7%    c, 0.16, 16%

d, 0.4, 40%    e, 0.8, 80%    f, 0.06, 6%

g, 0.05, 5%    h, 0.35, 35%    i, 0.12, 12%

j, 0.125, 12.5%    k, 0.625, 62.5%    l, 0.75, 75%

11, a,  $\frac{3}{4} \rightarrow 0.75 \rightarrow 75\%$

b,  $\frac{2}{5} \rightarrow 0.4 \rightarrow 40\%$

c,  $\frac{1}{4} \rightarrow 0.25 \rightarrow 25\%$

d,  $\frac{3}{5} \rightarrow 0.6 \rightarrow 60\%$

12/ Maths  $45/60 \times 100 = 75\%$  Science = 70% English 87.5%  
 Highest % is English

13/  $44/160 \times 100 = 27.5\%$

14/  $350/1000 = 35/100 = 35\%$

15/ a, 0.6667      b, 0.625      c, 0.8333      d, 0.7143      e, 0.1818  
 recurring      recurring      recurring      recurring      recurring

16/ a, 4      b, 15      c, 18      d,  $3/1 \times 2/1 = 6$       e,  $2/7 \times 1/4 = 1/14$       f,  $7/9 \times 1/21 = 1/27$

17/  $2/3 \times 14 = 28/3 = 9\frac{1}{3}$  hrs needed

Jane needs to buy 10 hrs

18/ a,  $1/2 + 0.24$

$0.5 + 0.24 = 0.74 = \frac{74}{100} = \frac{37}{50}$

b,  $0.8 - 1/5 = 0.8 - 0.2 = 0.6 = \frac{6}{10}$

c,  $0.3 \times 5/6 = \frac{1.5}{2} \times \frac{5}{6} = \frac{1}{4} = 0.25$

d,  $1/10 \div 0.15 = \frac{1}{10} \div \frac{15}{100} = \frac{1}{10} \times \frac{100}{15} = \frac{10}{15} = \frac{2}{3} = 0.666$