

Answers - Basics of Fractions Book 4

<p>Page 3</p> <p>1. <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td>40</td><td>8</td><td>7</td><td>35</td></tr> <tr><td>3</td><td>81</td><td>24</td><td>9</td></tr> <tr><td>7</td><td>49</td><td>9</td><td>63</td></tr> <tr><td>32</td><td>6</td><td>9</td><td>8</td></tr> <tr><td>7</td><td>45</td><td>56</td><td>9</td></tr> </table></p> <p>2. <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td>30</td><td>30</td><td>45</td><td>180</td></tr> <tr><td>45</td><td>20</td><td>30</td><td>6</td></tr> <tr><td>60</td><td>15</td><td>18</td><td>60</td></tr> <tr><td>75</td><td>12</td><td>15</td><td>4</td></tr> <tr><td>15</td><td>10</td><td>10</td><td>90</td></tr> </table></p> <p>3. <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td>5</td><td>2.5</td><td>2</td><td>1</td></tr> <tr><td>50</td><td>25</td><td>20</td><td>10</td></tr> <tr><td>500</td><td>250</td><td>200</td><td>100</td></tr> </table></p>	40	8	7	35	3	81	24	9	7	49	9	63	32	6	9	8	7	45	56	9	30	30	45	180	45	20	30	6	60	15	18	60	75	12	15	4	15	10	10	90	5	2.5	2	1	50	25	20	10	500	250	200	100	<p>Page 4</p> <p>Explanation of: What is a proper fraction? A proper fraction is part of one whole. It is less than one. The numerator will always be smaller than the denominator.</p> <p>Explanation of: What is a unit fraction? A unit fraction is one part out of one whole. It is a proper fraction with one as a numerator and the denominator of two or more.</p> <hr/> <p>Page 5</p> <p>Q1: a) $\frac{1}{2}$; b) $\frac{1}{4}$; c) $\frac{3}{4}$; d) $\frac{1}{3}$; e) $\frac{2}{3}$</p> <p>Q2: <input checked="" type="checkbox"/>, <input checked="" type="checkbox"/>; <input checked="" type="checkbox"/>, <input checked="" type="checkbox"/>; <input checked="" type="checkbox"/>, <input checked="" type="checkbox"/>, <input checked="" type="checkbox"/></p> <p>Q3: d) 2 red; e) 10 blue; f) 4 green.</p>
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<p>Page 6</p> <p>Q1: a) 12 sectors; b) Each sector is 5 minutes. c) Units used to measure time are seconds, minutes and hours.</p> <p>Q2: a) 30 min; b) 20 min; c) 15 min; d) 12 min; e) 10 min.</p> <p>Q3: $\frac{1}{2}$ hr = 30 min; $\frac{1}{3}$ hr = 20 min; $\frac{1}{4}$ hr = 15 min; $\frac{1}{5}$ hr = 12 min; $\frac{1}{6}$ hr = 10 min.</p> <p>Q3: a) $\frac{1}{3}$ of an hour is greater. b) $\frac{2}{3}$ of an hour is smaller.</p>	<p>Page 7</p> <p>Q1: a) £25.00; b) £13.75.</p> <p>Q2: a) i. 4:45 pm; ii. 12:45 pm; iii. 11:45 am. b) i. 3:30; ii. 2:45; iii. 3:15; iv. 3:00; v. 2:15; vi. 3:45</p>																																																				

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- Q1: a) 1 cl = 10 ml, b) 1 dl = 100 ml,
 c) 1 l = 1000 ml.
 d) Units used to measure capacity are millilitres, centilitres and litres.
- Q2: a) 5 ml; b) 50 ml; c) 500 ml; d) 2.5 ml;
 e) 25 ml; f) 250 ml; g) 2 ml; h) 20 ml;
 i) 200 ml.
- Q3: Ordering Fractions
 $\frac{1}{2}$ l = 500 ml; $\frac{1}{4}$ l = 250 ml;
 $\frac{1}{5}$ l = 200 ml; $\frac{1}{8}$ l = 125 ml.

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- Q1: a) 50 p; b) £1.00; c) 25 p; d) £2.50
 e) £5.50 f) 2 cartons can be filled.
- Q2: a) i. 3 tsp; ii. 9 tsp; iii. 15 tsp.
 b) i. 4 glasses; ii. 2 glasses;
 iii. 8 glasses; iv. 10 glasses;
 v. 22 glasses.
 c) 4 jugs; 10 jugs.

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- Q1: a) 1 g = 1000 mg, b) 1 kg = 1000 g,
 c) 1 t = 1000 kg.
 d) Units used to measure mass are milligrams, grams; kilograms and tons.
- Q2: a) 500 g; b) 250 g; c) 200 g; d) 125 g;
 e) 375 g; f) 875 g; g) 750 g; h) 600 g;
 i) 800 g.
- Q3: a) Ordering Fractions
 $\frac{1}{8}$ kg = 125 g; $\frac{1}{4}$ kg = 250 g;
 $\frac{3}{8}$ kg = 375 g; $\frac{1}{2}$ kg = 500 g;
 $\frac{5}{8}$ kg = 625 g; $\frac{6}{8} = \frac{3}{4} = 750$ g;
 $\frac{7}{8}$ kg = 875 g;
 b) 200 g = $\frac{1}{5}$ kg; 400 g = $\frac{2}{5}$ kg;
 600 g = $\frac{3}{5}$ kg; 800 g = $\frac{4}{5}$ kg;
 1000 g = $\frac{5}{5}$ kg.

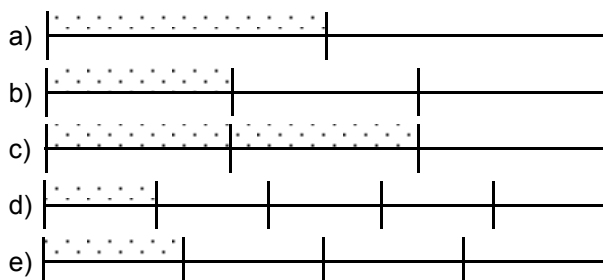
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- Q1: a) i. 48p; ii. 8 p;
 b) i. 32 p; ii. 96 p.
- Q2: a) i. 50 g; ii. 100 g; iii. 200 g.
 b) i. 400 kg; ii. 850 kg; iii. 3100 kg;
 iv. 3375 g; v. 2625 kg;

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- Q1: a) 1 cm = 10 mm, b) 1 m = 100 cm,
 c) 1 km = 1000 m.
 d) Units used to measure lengths are meters, millimetres, centimetres; kilometres.
- Q2: a) 50 mm; b) 500 cm; c) 5000 m;
 d) 25 mm; e) 250 cm; f) 2500 m;
 g) 20 mm; h) 200 cm; i) 2000 m.

Q3: Ordering Fractions



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- Q1: a) i. £1.00; ii. 50 p; iii. 25 p; iv. 20 p;
 v. £2.50;
 b) $\frac{3}{4}$ m string will cost more. 15 p more.
- Q2: a) 150 cm;
 i. 75 cm; ii. 30 cm; iii. 50 cm;
 iv. 37.5 cm; v. 15 cm.
- Q2: b) 220 cm; i. 110 cm; ii. 44 cm;
 iii. 55 cm; iv. 22 cm.

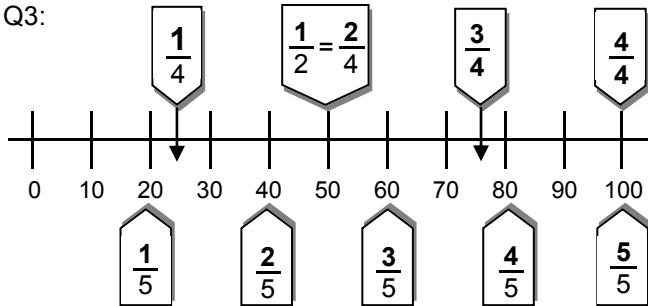
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Q1: c) i. 25 red; ii. 20 blue.
d) 100 pence. i. 25 p; ii. 20 p.

Q2: a) 50; b) 25; c) 50; d) 75; e) 100;
f) 20; g) 40; h) 60; i) 80; j) 100

Q3:



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Q1: a) 60p; b) £90.00; c) £120.00;
d) £1.00; e) £1.00

Q2: a) i. $\frac{4}{24} = \frac{1}{6}$; ii. $\frac{6}{24} = \frac{1}{4}$;

iii. $\frac{2}{24} = \frac{1}{12}$; iv. $\frac{12}{24} = \frac{1}{2}$;

Q2: a) iv. $\frac{1}{2}$ b) i. 75; ii. 60; iii. $\frac{3}{4}$

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Q1: a) 360° ; b) 180° ; c) 90° ;
d) Units used to measure angles are degrees.

Q2: a) 180° ; b) 120° ; c) 90° ; d) 72° ; e) 60° ; f) 45° .

Q3: a) 90° ; b) 60° ; c) 45°

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Q1: a) i. £1.60; ii. 40 p; iii. £2.40

b) i. 75 p; ii. £3.00

Q2: a) 180° ; b) 240° ; c) 270° ; d) 216° ; e) 180°

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Q2: Divide by 2. $\frac{1}{2}$ of 10 is 5

Q2: a) 125; b) £45; c) 12.5 cm = 125 mm;
d) 10.5 m = 105 mm; e) 27.5 kg = 27500 g.

Q3: a) 75 p; b) £2.25; c) £15.75;
d) 500g; e) 4

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Q1: a) £3.00; b) £30.00; c) £9.00; d) £4.50.
b) i. 60 p; ii. 24 p; iii. 45 p

Q2: Divide by 3 and multiply by 2.

Q2: a) 50; b) £60; c) 50 cm = 500 mm;
d) 17 m = 1700 cm; e) 44 kg = 44000 g.

Glass measurement. $\frac{2}{3}$ of 150 ml is 100 ml.

Q3: a) 12:20 b) 11:40; c) 6:40; d) 5:20

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Q1: Shape A

Q2: a) 55; b) £2.50; c) 25 cm = 250 mm;
d) 75 m = 7500 cm; e) 18 kg = 18000 g.

Q3: a) 100 cm^2 ; b) 48 cm^2 ; c) 27 cm^2

Mark the glass at 25 ml. $\frac{1}{4} = \frac{25}{100} = \frac{250}{1000}$

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Q1: $\frac{1}{5} = 0.2$; $\frac{2}{5} = 0.4$; $\frac{3}{5} = 0.6$; $\frac{4}{5} = 0.8$

Q2: a) 44; b) £36.00; c) 45 cm = 450 mm;
d) 80 m = 8000 cm; e) 24 kg = 24000 g.

Mark the glass at 20 ml. $\frac{1}{5} = \frac{20}{100} = \frac{200}{1000}$

Q3: a) $\frac{1}{5} = 2$; $\frac{2}{5} = 4$; $\frac{3}{5} = 6$; $\frac{4}{5} = 8$

b) $\frac{1}{5} = 20$; $\frac{2}{5} = 40$; $\frac{3}{5} = 60$; $\frac{4}{5} = 80$

c) $\frac{1}{5} = 200$; $\frac{2}{5} = 400$; $\frac{3}{5} = 600$; $\frac{4}{5} = 800$

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Q1: a) $\frac{1}{6}$ smaller; b) $\frac{5}{6}$ greater.

Q2: a) 10; b) 20; c) 30; d) 40; e) 50;
f) 12; g) 10; h) 12; i) 36; j) 40

Mark the glass at 30 ml. $\frac{1}{2} = \frac{3}{6} = \frac{30}{60}$

Q3: a) 6 sectors; 360° ;
b) i. $\frac{1}{6}$ is plain; $\frac{4}{6} = \frac{2}{3}$ blue; $\frac{3}{6} = \frac{1}{2}$ red;
c) i. 60° ; ii. 120° iii. 180° .

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Q1: $\frac{1}{7}$; $\frac{2}{7}$; $\frac{3}{7}$; $\frac{4}{7}$; $\frac{5}{7}$; $\frac{6}{7}$; $\frac{7}{7}$

Q2: a) 1 day; b) 8 days; c) 15 days; d) 2 days;
e) 16 days; f) 3.5 days; g) 10.5 days;
h) 17.5 days; i) 24.5 days; j) 31.5 days

Q3: a) 1 week; b) $\frac{1}{2}$ week; c) $1\frac{1}{2}$ week;
d) 2 week; e) $2\frac{1}{2}$ weeks; f) $3\frac{1}{2}$ weeks.

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Q1: a) >; b) =; c) < d) Octagon.

Q2: a) 110; b) £60; c) 150 cm = 1500 mm;
d) 490 m = 49000 cm; e) 125 cm = 1250 mm

Mark the glass at 125 ml. $\frac{1}{8} = \frac{125}{1000}$

Q3: a) 10p; b) 125g; c) 30p; d) £1.10
e) £2.40.

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Q1: a) <; b) >; c) =

Q2: a) 1; b) 10; c) 100; d) 5; e) 10; f) 100;
g) 16; h) 160; i) 1600

Mark the glass at 100 ml. $\frac{9}{10} = \frac{900}{1000}$

Q3: a) £9.00; b) £90.00; c) £45.00;
d) £9.00; e) £27.00

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Q1: a) Coloured rectangles should be:

a) $\frac{12}{40}$; b) $\frac{6}{20}$; c) $\frac{9}{30}$

Q2: a) 24; b) £45; c) 49 cm = 490 mm;
d) 100 m = 10000 cm; e) 100 kg = 100000 g

Mark the glass at 1000 ml. $\frac{1}{10} = \frac{100}{1000}$

Q3: a) 100 g; b) 10100 g or 10.1 kg;
c) 5500 g; d) 7000 g - 1000 g = 6000 g.

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Q1: a) $\frac{2}{3}$ smaller; b) $\frac{5}{6}$ greater.

Q2: a) 12 sectors, Full circle is 360° ;
one sector = 30°

b) i. $\frac{3}{12} = \frac{1}{4}$ red; ii. $\frac{6}{12} = \frac{1}{2}$ blue;
c) i. 90° red; ii. 180° blue.

Q3: a) 4 month; b) 2 months; c) 1 months;
d) 5 months.

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Q1: a) ii. Finish time 5:55 p.m.
b) i. 24 hrs; ii. 32 hrs; iii. 30 hrs; iv. 36 hrs

Q2: a) 40° ; b) 30° ; c) 24° ; d) 15° ; e) 48° ;
f) 20° ; g) 45° ; h) 90° ; i) 45° ; j) 60° ;
k) 120° ; l) 80°

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Q1: a) Mon £32.00, £4.00; b) Tue £36.00, £0.00;
c) Wed £12.00, £24.00; d) Thu £20.00, £16.00;
e) Fri £16.00, £20.00; f) Sat £4.00, £32.00;
g) Sun £8.00, £28.00; h) Own answer.

Q2: c) 31.5 days.

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<p>Page 30</p> <p>Q1: a) 12 sectors; 360°; b) i) $\frac{4}{12} = \frac{1}{3}$ red; ii) $\frac{2}{12} = \frac{1}{6}$ blue; iii) $\frac{6}{12} = \frac{1}{2}$</p> <p>Q2: a) 240°; b) 240°; c) 270°; d) 180°; e) $\frac{3}{4}$; f) $\frac{2}{3} = \frac{4}{6}$ (a and b).</p> <p>Q3: a) i) 50°; ii) 30°; b) i) 30°; ii) 18°; c) i) 25°; ii) 15°</p>	<p>Page 31</p> <p>Q1: a) i. 100 cm; ii. 50 cm; iii. 150 cm b) i. 800 cm; ii. 400 cm; iii. 480 cm</p> <p>Q2: a) $\frac{1}{4}$ to each child. b) i. 24 km^2; ii. 6 km^2</p>
<p>Page 32</p> <p>Q1: d) 2 red; e) 10 blue; f) 4 green.</p> <p>Q2: a) i. 90 p; ii. 36 p; iii. 60 p b) i. £1.20; ii. 48 p; iii. 90 p c) Shop B is expensive.</p> <p>Q3: a) i. 4:00pm; b) i. Half a day or 12 hours; ii. 1 day or 24 hours. iii. One and a half day or 36 hours.</p>	<p>Page 33</p> <p>Q1: a) Glass B; b) 200 ml; c) No</p> <p>Q2: a) i. 500 g; ii. 1500 g; iii. 2 kg or 2000 g; b) i. 400 g; ii. 1200 g; iii. 2 kg or 2000 g</p> <p>Q3: a) 45 cm; b) 55 cm</p>
<p>Page 34</p> <p>Q1: a) Glass B; b) 150 ml; c) Yes d) Glass A holds 750 ml and Glass B holds 600 ml. $750 + 600 = 1350$ ml which is more than 1 litre.</p> <p>Q2: a) i. 32 g; ii. 8 g; b) i. 48 g; ii. 24 g;</p> <p>Q3: a) 750 m; b) 1125 m. It is more than 1 m</p>	