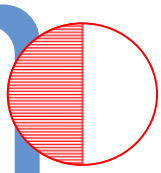
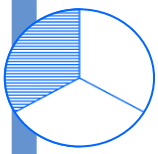
Answers - Basics of Fractions Book 1

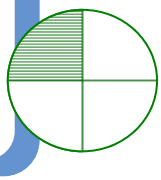
Developing Fluency In Numeracy

Fractions all around us:

- ✓ in shapes
- ✓ in money
- ✓ in time
- ✓ in lengths
- ✓ in mass
- ✓ in capacity
- ✓ to share in equal measures







Answers to Fractions Basics Book 1

Page 3

Q1: a) 79 b) 83 c) 93 d) 106 e) 124 f) 138

Q2: a) 11 b) 38 c) 21 d) 54 e) 42 f) 14

Q3:

3 × 5 = 15	30 ÷ 3 = 10	3 × 9 = 27	40 ÷ 4 = 10
8 × 2 = 16	18 ÷ 3 = 6	7 × 2 = 14	24 ÷ 3 = 8
3 × 4 = 12	30 ÷ 2 = 15	4 × 5 = 20	24 ÷ 4 = 6

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2. a. Fraction is part of one whole.
   b. Yes. c. Yes
   d. Numerator. e. Denominator
   f, g and h own answer.

Page 9 **Q 2:** a) ☒ b) ☑ **Q 3:** a) ☑ b) ☒ c) ☒

Page 11 **Q 2:** a) ☑ b) ☒ **Q 3:** a) ☒ b) ☑ c) ☒

Page 13 **Q 2:** a) ☒ b) ☑ **Q 3:** a) ☑ b) ☒ c) ☒

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Q1 $\frac{1}{2}$ of 12 = 6

Q2: a) $\frac{1}{2}$ of 4 = **2** (this is 4 ÷ 2 = **2** 2 x 2 = **4**)

b) $\frac{1}{2}$ of 6 = **3** (this is 6 ÷ 2 = **3** 2 x 3 = **6**)

c) $\frac{1}{2}$ of 8 = **4** (this is 8 ÷ 2 = **4** 2 x 4 = **8**)

d) $\frac{1}{2}$ of 10 = **5** (this is 10 ÷ 2 = **5** 2 x 5 = **10**)

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Q1: a) $\frac{1}{2}$ of **8** = **4** (this is **8** ÷ 2 = **4**)

b) $\frac{1}{2}$ of **12** = **6** (this is **12** ÷ 2 = **6**)

c) $\frac{1}{2}$ of **10** = **5** (this is **10** ÷ 2 = **5**)

Q2: a) $\frac{1}{2}$ of **12** = **6** (this is **12** ÷ 2 = **6**)

b) $\frac{1}{2}$ of **14** = **7** (this is **14** ÷ 2 = **7**)

c) $\frac{1}{2}$ of **18** = **9** (this is **18** ÷ 2 = **9**)

Q3: a) $\frac{1}{2}$ of **20** = **10** (this is **20** ÷ 2 = **10**)

b) $\frac{1}{2}$ of **24** = **12** (this is **24** ÷ 2 = **12**)

c) $\frac{1}{2}$ of **30** = **15** (this is **30** ÷ 2 = **15**)

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Q1: a) $\frac{1}{3}$ of **12** = **4** (this is **12** ÷ 3 = **4**)

Q2: a) $\frac{1}{3}$ of **3** = **1** (this is **3** ÷ 3 = **1** 3 x 1 = **3**)

b) $\frac{1}{3}$ of **6** = **2** (this is **6** ÷ 3 = **2** 3 x 2 = **6**)

c) $\frac{1}{3}$ of **9** = **3** (this is **9** ÷ 3 = **3** **3** x 3 = **9**)

d) $\frac{1}{3}$ of **12** = **4** (this is **12** ÷ 3 = **4** **3** x 4 = **12**)

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Q1: a) $\frac{1}{3}$ of **6** = **2** (this is **6** ÷ 3 = **2**)

b) $\frac{1}{3}$ of **12** = **4** (this is **12** ÷ 3 = **4**)

c) $\frac{1}{3}$ of **9** = **3** (this is **9** ÷ 3 = **3**)

Q2: a) $\frac{1}{3}$ of **12** = **4** (this is **12** ÷ 3 = **4**)

b) $\frac{1}{3}$ of **15** = **5** (this is **15** ÷ 3 = **5**)

c) $\frac{1}{3}$ of **18** = **6** (this is **18** ÷ 3 = **6**)

Q3: a) $\frac{1}{3}$ of **27** = **9** (this is **27** ÷ 3 = **9**)

b) $\frac{1}{3}$ of **24** = **8** (this is **24** ÷ 3 = **8**)

c) $\frac{1}{3}$ of **30** = **10** (this is **30** ÷ 3 = **10**)

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Q1: a) $\frac{1}{4}$ of **12** = **3** (this is **12** ÷ 4 = **3**)

Q2: a) $\frac{1}{4}$ of **4** = **1** (this is **4** ÷ 4 = **1** 4 x 1 = **4**)

b) $\frac{1}{4}$ of **8** = **2** (this is **8** ÷ 4 = **2** 4 x 2 = **8**)

c) $\frac{1}{4}$ of **12** = **3** (this is **12** ÷ 4 = **3** 4 x 3 = **12**)

d) $\frac{1}{4}$ of **16** = **4** (this is **16** ÷ 4 = **4** **4** x 4 = **16**)

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Q1: a) $\frac{1}{4}$ of **8** = **2** (this is **8** ÷ 4 = **2**)

b) $\frac{1}{4}$ of **12** = **3** (this is **12** ÷ 4 = **3**)

c) $\frac{1}{4}$ of **20** = **5** (this is **20** ÷ 4 = **5**)

Q2: a) $\frac{1}{4}$ of **12** = **4** (this is **12** ÷ 4 = **3**)

b) $\frac{1}{4}$ of **20** = **5** (this is **20** ÷ 4 = **5**)

c) $\frac{1}{4}$ of **24** = **6** (this is **24** ÷ 4 = **6**)

Q3: a) $\frac{1}{4}$ of 3**6** = **9** (this is **36** ÷ 4 = **9**)

b) $\frac{1}{4}$ of **40** = **10** (this is **40** ÷ 4 = **10**)

c) $\frac{1}{4}$ of **32** = **8** (this is **32** ÷ 4 = **8**)

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Q1: a) $\frac{1}{2}$ of 4 = **2** b) $\frac{1}{2}$ of 6 = **3** c) $\frac{1}{2}$ of 8 = **4**

Q2: a) $\frac{1}{2}$ of 10 = **5** b) $\frac{1}{2}$ of 12 = **6** c) $\frac{1}{2}$ of 14 = **7**

d) $\frac{1}{2}$ of 20 = **10** e) $\frac{1}{2}$ of 16 = **8** f) $\frac{1}{2}$ of 18 = **9**

g) $\frac{1}{2}$ of 22 = **11** h) $\frac{1}{2}$ of 24 = **12** i) $\frac{1}{2}$ of 30 =**15**

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Q1: a) £2.00 b) £4.00 c) £9.00
d) £10.00 e) £12.00

Q2: a) i) £18.00 ii) £ 18.00
b) i) £9.00 ii) £9.00
c) i) £4.50 ii) £4.50

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Q1: a) $\frac{1}{3}$ of 3 = **1** b) $\frac{1}{3}$ of 6 = **2** c) $\frac{1}{3}$ of 9 = **3**

Q2: a) $\frac{1}{3}$ of 15 = **5** b) $\frac{1}{3}$ of 12 = **4** c) $\frac{1}{3}$ of 18 = **6**

d) $\frac{1}{3}$ of 21 = **7** e) $\frac{1}{3}$ of 27 = **9** f) $\frac{1}{3}$ of 24 = **8**

g) $\frac{1}{3}$ of 30=**10** h) $\frac{1}{3}$ of 33 = **11** i) $\frac{1}{3}$ of 36 = **12**

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Q1: a) £1.00 b) £3.00 c) £6.00
d) £10.00 e) £8.00

Q2: a) i) £12.00 ii) £24.00
b) i) £8.00 ii) £16.00
c) i) £8.00 ii) £8.00

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Q1: a) $\frac{1}{4}$ of 4 = **1** b) $\frac{1}{4}$ of 12 = **3** c) $\frac{1}{4}$ of 8 = **2**

Q2: a) $\frac{1}{4}$ of 8 = **2** b) $\frac{1}{4}$ of 12 = **3** c) $\frac{1}{4}$ of 24 = **6**

d) $\frac{1}{4}$ of 20 = **5** e) $\frac{1}{4}$ of 16 = **4** f) $\frac{1}{4}$ of 28 = **7**

g) $\frac{1}{4}$ of 32 = **8** h) $\frac{1}{4}$ of 36 = **9** i) $\frac{1}{4}$ of 40 = **10**

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Q1: a) £1.00 b) £2.00 c) £4.00
d) £5.00 e) £6.00

Q2: a) i) £12.00 ii) £36.00
b) i) £9.00 ii) £27.00
c) i) £9.00 ii) £18.00

Answers to Fractions Basics Book 1

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60 minutes equals one hour.

60 seconds equals one minute.

Q1: Check time against the hands drawn on the clock face.

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Q1: Check time against the hands drawn on the clock face.

Q2: From 12:00 am to 12:00 pm is 12 hours.
From 12:00 pm to 12:00 am is 12 hours.
24 hours equals one day.

a) Midday is 12:00 pm (In the afternoon).

b) Midnight is 12:00 am (In the night).

c) 24 hours d) 12 hours e) 6 hours f) 8 hours

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Q1: a) $\frac{1}{2}$ of **4** = **2** cm b) $\frac{1}{2}$ of **8** = **4** cm
c) $\frac{1}{2}$ of **6** = **3** cm

Q2: a) $\frac{1}{3}$ of **6** = **2** cm b) $\frac{1}{3}$ of **9** = **3** cm
c) $\frac{1}{3}$ of **3** = **1** cm

Q3: a) $\frac{1}{4}$ of **4** = **1** cm b) $\frac{1}{4}$ of **8** = **2** cm
c) $\frac{1}{4}$ of **12** = **3** cm

Q4: $\frac{1}{2}$ is bigger.

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Q1: a) $\frac{1}{2}$ b) $\frac{1}{4}$ c) $\frac{1}{3}$ d) $\frac{1}{2}$ e) $\frac{1}{3}$ f) $\frac{1}{4}$

Q2: a) ☒ b) ☑ c) ☒ d) ☑ e) ☑
f) ☒ g) ☒

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Q1: a) 1000 g 500 g b) 1000 kg 500 kg

Q2: a) 4 kg b) 18 kg c) 9 kg d) 12 kg e) 6 kg
f) 9 kg g) 8 kg h) 7 kg i) 6 kg j) 7 kg

Q3: a) i) 18 g ii) 12g iii) 9 g
b) i) 30 g ii) 20 g iii) 15 g
i) $\frac{1}{3}$ of 60 is more than $\frac{1}{2}$ of 36 by 2 grams.

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Q2: a) 12 l b) 30 l c) 6 l d) 15 l e) 8 l
f) 20 l g) 11 l h) 22 l i) 11 l j) 12 l

Q3: a) $\frac{1}{2}$ of **100** = **50** ml b) $\frac{1}{4}$ of **100** = **25** ml
d) $\frac{1}{2}$

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Q1: a) i. 6 ii. 8 iii. 12

b) i. 9 ii. 12 iii. 18

c) i. 12 ii. 16 iii. 24

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Q1: a) 2, 4 and 6 grid coloured.
b) 1, 2 and 3 grid coloured.
c) 1, 3 and 4 grid coloured.

Q2: a) 4 b) 15 c) 5 d) 10 e) 7 f) 10
g) 7 h) 25 i) 13 j) 14 k) 24 l) 40

Q3: a) 10, b) 30 left c) 10 d) 10 or 15
Either is correct depending on the interpretation.

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Own answers.

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