

SKE Primary: Foundation Strand**Answers to Exercises****Unit 8 Decimals, Fractions and Percentages****8.1 Conversion: Decimals into Fractions**

1. (a) $\frac{7}{10}$ or 7 tenths (b) $\frac{7}{100}$ or 7 hundredths (c) 7 units
 (d) $\frac{7}{1000}$ or 7 thousandths (e) $\frac{7}{100}$ or 7 hundredths
 (f) $\frac{7}{1000}$ or 7 thousandths
2. (a) 0.106, 0.16, 0.601, 0.61, 0.616, 0.661
 (b) 0.28, 0.4, 0.47, 0.78, 0.82
 (c) 0.2, 0.23, 0.3, 0.301, 0.32
 (d) 0.17, 0.19, 0.79, 0.9, 0.91
3. (a) $\frac{1}{10}$ (b) $\frac{9}{10}$ (c) $\frac{3}{10}$ (d) $\frac{7}{100}$
 (e) $\frac{1}{4}$ (f) $\frac{1}{1000}$ (g) $\frac{1}{20}$ (h) $\frac{3}{1000}$
 (i) $\frac{17}{1000}$ (j) $\frac{71}{100}$ (k) $\frac{87}{100}$ (l) $\frac{210}{1000}$
4. (a) $\frac{2}{5}$ (b) $\frac{2}{25}$ (c) $\frac{27}{50}$ (d) $\frac{3}{500}$
 (e) $\frac{3}{250}$ (f) $\frac{81}{500}$ (g) $\frac{6}{125}$ (h) $\frac{21}{25}$
 (i) $\frac{41}{125}$ (j) $\frac{7}{500}$ (k) $\frac{1}{125}$ (l) $\frac{27}{250}$
5. (a) 3 (b) 7 (c) 9
 (d) 1 (e) 3 (f) 2
6. (a) $\frac{6}{5}$ or $1\frac{1}{5}$ (b) $\frac{151}{50}$ (c) $\frac{103}{25}$
 (d) $\frac{181}{50}$ (e) $\frac{501}{125}$ (f) $\frac{1003}{200}$
7. (a) 1.3 or $1\frac{3}{10}$ (b) 0.5 or $\frac{1}{2}$ (c) 1.33 or $1\frac{33}{100}$ (d) 7.9 or $7\frac{9}{10}$
 (e) 0.36 or $\frac{9}{25}$ (f) 1.91 or $1\frac{91}{100}$ (g) 7.86 or $7\frac{43}{50}$ (h) 0.418 or $\frac{209}{500}$
8. (a) 0.61 or $\frac{61}{100}$ (b) 00.11 or $\frac{11}{100}$ (c) 0.44 or $\frac{11}{25}$ (d) 0.34 or $\frac{17}{50}$

8.1

Answers to Exercises

9. (a) $\frac{1}{10000}$ (b) $\frac{9}{10000}$ (c) $\frac{21}{100000}$ (d) $\frac{123491}{1000000}$
10. (a) $\frac{8}{100000} = \frac{1}{12500}$ (b) $\frac{2222}{100000} = \frac{1111}{50000}$ (c) $\frac{102}{100000} = \frac{51}{50000}$
- (d) $\frac{4}{1000000} = \frac{1}{250000}$ (e) $\frac{224}{1000000} = \frac{7}{31250}$ (f) $\frac{2}{10000000} = \frac{1}{5000000}$

8.2 Conversion: Fractions into Decimals

1. (a) 0.3 (b) 0.07 (c) 0.009 (d) 0.13
(e) 0.131 (f) 0.047 (g) 0.21 (h) 0.183
(i) 0.19 (j) 0.019 (k) 0.11 (l) 0.81
2. (a) 1 (b) 7 (c) 2 (d) 1
(e) 50 (f) 500 (g) 25 (h) 25
3. (a) 0.5 (b) 0.8 (c) 0.18 (d) 0.12
(e) 0.15 (f) 0.006 (g) 0.004 (h) 0.35
(i) 0.305 (j) 0.72 (k) 0.072 (l) 0.25
4. (a) 1.2 (b) 2.12 (c) 5.218
(d) 20.08 (e) 2.008 (f) 41.8
5. (a) 1.24 (e) 3.2 (f) 2.002
6. (a) $\frac{3}{5}$ or 0.6 (b) $\frac{3}{8}$ or 0.375 (c) $\frac{25}{4}$ or 6.25
(d) $\frac{16}{5}$ or 3.2 (e) $\frac{13}{2}$ or 6.5 (f) $\frac{15}{4}$ or 3.75
7. (a) 0.875 (b) 0.875
8. (a) 8.2 (b) 8.2
9. 0.125
10. 0.8125

8.3 Introduction to Percentages

1. (a) 47% (b) 36% (c) 28%
(d) 30% (e) 80% (f) 75%

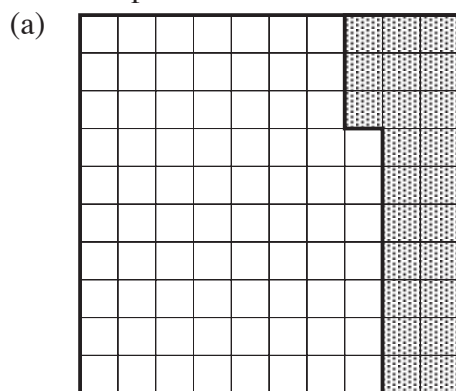
8.3

Answers to Exercises

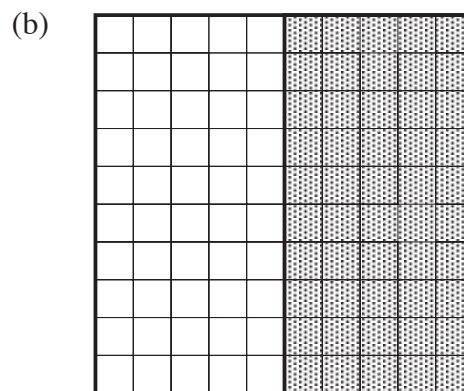
2. (a) 53% (b) 64% (c) 72%
 (d) 70% (e) 20% (f) 25%

3. 24%

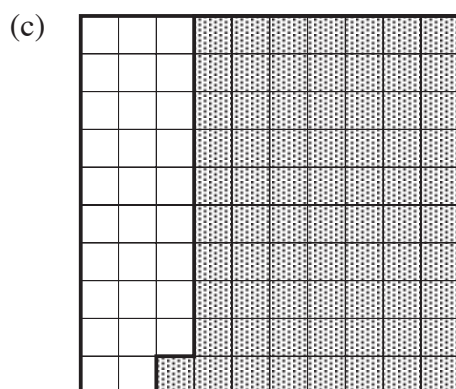
4. For example:



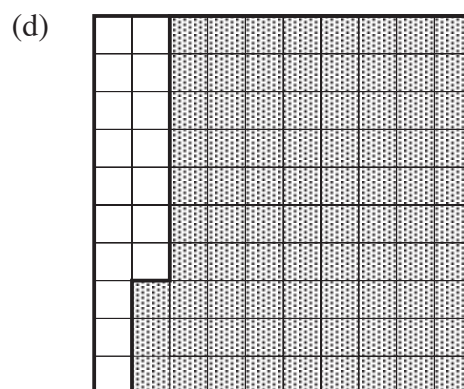
23% shaded



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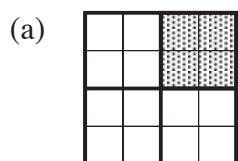


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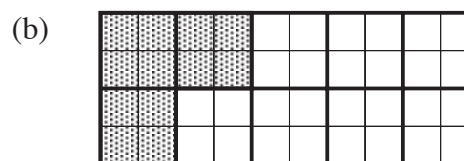


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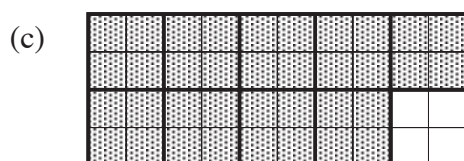
5. For example:



25% shaded



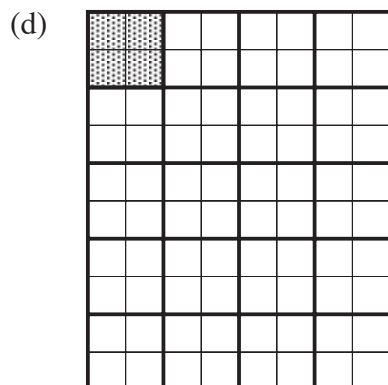
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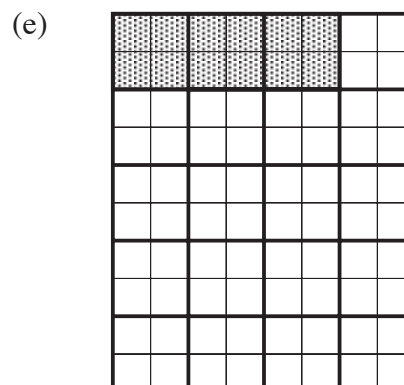
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8.3

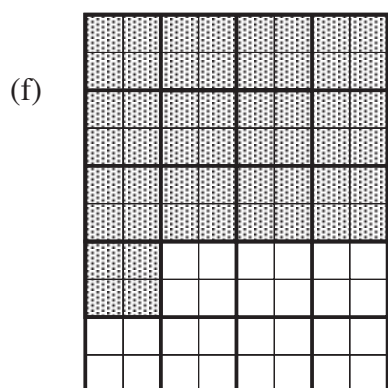
Answers to Exercises



5% shaded



15% shaded



65% shaded

6. (a) 90% (b) 70% (c) 55% (d) 95%
 (e) 80% (f) 60% (g) 75%
7. 65%
8. 12%
9. (a) £100 (b) 150 kg (c) 30p (d) 10p (e) 1.5 kg
 (f) 30 m (g) £8 (h) 52p (i) £60 (j) 150 kg
10. (a) 40% (b) Adam: £15; Ben: £10 (c) Adam: £18; Ben: £12

8.4 Decimals, Fractions and Percentages

1. (a) 0.42 (b) 0.37 (c) 0.2 (d) 0.05 (e) 0.08
 (f) 0.1 (g) 0.22 (h) 0.03 (i) 0.15
2. (a) 14% (b) 72% (c) 55% (d) 40% (e) 3%
 (f) 90% (g) 18% (h) 4% (i) 70%

8.4

Answers to Exercises

3. (a) $\frac{1}{2}$ (b) $\frac{3}{10}$ (c) $\frac{4}{5}$ (d) $\frac{7}{10}$ (e) $\frac{3}{20}$
 (f) $\frac{1}{4}$ (g) $\frac{16}{25}$ (h) $\frac{49}{50}$ (i) $\frac{14}{25}$

4. (a) 34% (e) 15% (f) 28%
 (g) 60% (h) 70% (i) 75%
 (j) 5% (k) 50% (l) 12%

5.

<i>Fraction</i>	<i>Decimal</i>	<i>Percentage</i>
$\frac{1}{25}$	0.04	4%
$\frac{1}{10}$	0.1	10%
$\frac{1}{2}$	0.5	50%
$\frac{9}{20}$	0.45	45%
$\frac{7}{50}$	0.14	14%
$\frac{21}{25}$	0.84	84%

6. (a) $\frac{124}{200}$ or $\frac{31}{50}$ (b) 62% (c) 38%

7. 10%

8. (a) 75% (b) 10% (c) 15%

9. (a) 24% (b) $\frac{24}{100}$ or $\frac{6}{25}$

10. (a) 35% (b) 25% (c) 75%
 (d) $\frac{4}{10}$ or $\frac{2}{5}$ (e) $\frac{1}{4}$ (f) $\frac{3}{4}$