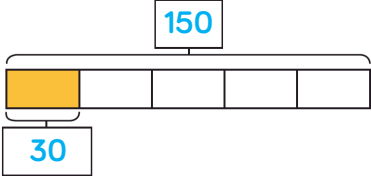
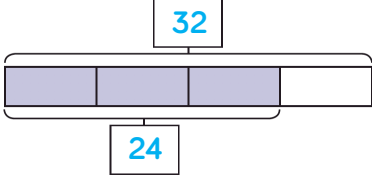


Y7 – Spring – Block 3 – Step 1 – Find a fraction of a given amount Answers

Question	Answer
1	a) The whole represents 40. It has been divided into 5 equal parts, so each part represents $\frac{1}{5}$ of 40 b) 8
2	a) 12 b) 9 c) 7 d) 5
3	a) The whole represents 40. It has been divided into 5 equal parts, so each part represents $\frac{1}{5}$ of 40 and 3 parts represent $\frac{3}{5}$ of 40 b) 24
4	a) 24 b) 27 c) 14 d) 25
5	a) 126 lb b) 504 g c) 475 m d) 6.3 km e) 9.9 km
6	18
7	a) 18 b) $\frac{1}{2}$
8	Mo The amount of cereal in the box is now 600 g. To get back to 500 g, Alex would need to eat 100 g. $\frac{1}{5}$ of 600 g is 120 g, so Alex would need to eat less than $\frac{1}{5}$ of the cereal.




Question	Answer
1	a) 72 b) 128 c) Both involve $\frac{3}{4}$ of an amount. In part a), we are finding $\frac{3}{4}$ of the whole. In part b), we are finding the whole given the value of $\frac{3}{4}$
2	a)  b) 60 c) 90 d) 150 e) $\frac{1}{5}$ of 150 = 30
3	 $\frac{3}{4}$ of 32 = 24
4	a) The value of the whole number is 32 b) The value of the whole number is 16 c) The value of the whole number is 196
5	30
6	a) $\frac{2}{3}$ of 27 = $\frac{3}{4}$ of 24 b) $\frac{5}{7}$ of 560 = $\frac{4}{5}$ of 500 c) $\frac{6}{6}$ of 54 = 54 d) multiple possible answers, e.g.: $\frac{5}{8}$ of 24 = $\frac{3}{5}$ of 25
7	The input is 891
8	multiple possible answers, e.g.: 45 If Ron is thinking of an integer, he could be thinking of any multiple of 45

Y7 – Spring – Block 3 – Step 2 – Use a given fraction to find the whole and or other fractions Answers

Question	Answer
9	£60
10	144y
11	19, 24, 29, 34

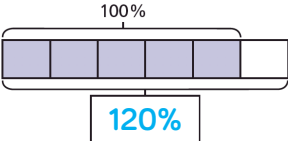
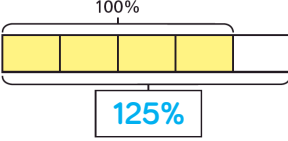
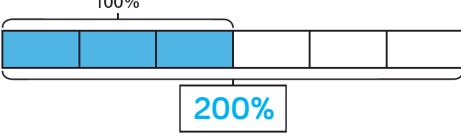
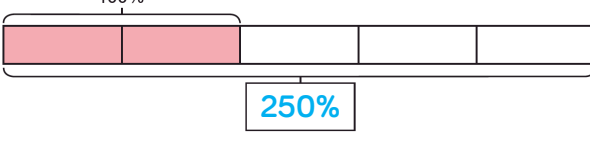
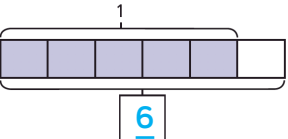
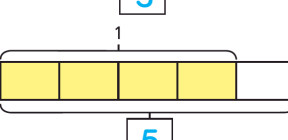
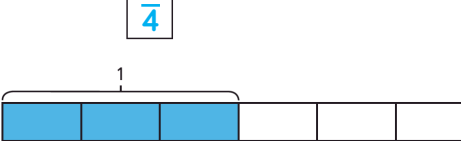
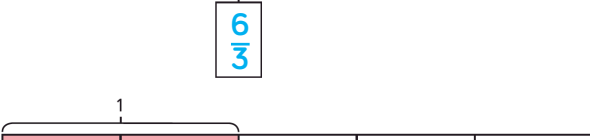
Question	Answer
1	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>10% of 80</p> <p>20% of 80</p> <p>25% of 80</p> <p>50% of 80</p> </div> <div style="text-align: center;"> </div> </div> <p>To find 10%, divide by 10 To find 20%, divide by 5 To find 25% divide by 4 To find 50%, divide by 2</p>
2	<p>No.</p> <p>To find 5%, we divide by 20, because $5\% = \frac{1}{20}$</p>
3	<p>50% of £150 = £75 25% of £150 = £37.50 75% of £150 = £112.50 20% of £150 = £30 10% of £150 = £15 5% of £150 = £7.50</p>
4	<p>multiple possible answers, e.g.: Find 50%, then halve it for 25% and add the two together.</p>
5	<p>a) 30.6 b) 23.43 c) 3,024 d) 114 e) 792</p>
6	<p>a) 3 b) 2 c) 7</p>
7	<p>£385</p>
8	<p>25% 50% 12.5%</p>

Y7 – Spring – Block 3 – Step 3 – Find a percentage of a given amount using mental methods Answers
(continued)

Question	Answer
9	a) 760 b) multiple possible answers, e.g.: Divide by 10 for 10%, then halve this for 5% and subtract from 800
10	a) 100 b) 100 c) 240 d) 144
11	 = <input type="text" value="50"/>  = <input type="text" value="15"/>  = <input type="text" value="1.5"/>

Y7 – Spring – Block 3 – Step 4 – Find a percentage of a given amount using a calculator Answers

Question	Answer
1	a) £86.40 b) £44.24
2	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">$542 \div 100 \times 83$</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">$83 \times 542 \div 100$</div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">$542 \div 83 \times 100$</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">0.83×542</div> </div> <p>$83\% = 0.83 = \frac{83}{100}$ so all the other calculations are correct.</p>
3	= 84% of 50 = 42 50% of 84 = 42
4	No. 17% of 474,632 = 80,687.44 and it is not possible to have part of a person.
5	74 cm
6	Fast Bikes Bike World: £127.20, Fast Bikes: £125.99
7	Divide 250 by 100 to find 1% and subtract this from 250
8	£11,279.53
9	a) £27.78 b) £166.70 c) £481.99 d) He gets paid £1,856.69
10	Bank Central Bank Central: £888.63 after 2 years Bank Happy: £888.42 after 2 years

Question	Answer
1	<p>a) </p> <p>b) </p> <p>c) </p> <p>d) </p>
2	<p>a) 72 b) 75 c) 120 d) 150</p>
3	<p>a) </p> <p>b) </p> <p>c) </p> <p>d) </p>

Y7 – Spring – Block 3 – Step 5 – Solve problems with fractions greater than 1 and percentages greater than 100% Answers (continued)

Question	Answer
4	a) $\frac{6}{5}$ of 80 = 96 b) $\frac{5}{4}$ of 80 = 100 c) $\frac{6}{3}$ of 80 = 160 d) $\frac{5}{2}$ of 80 = 200
5	a) No. It is not possible to score more than full marks on a test. b) Yes. It is possible to improve a score by 20% and so score 120% of the previous score.
6	$\frac{8}{5}$
7	a) 175% b) $\frac{7}{4}$
8	
9	No. The population cannot decrease by more than 100%. When it has decreased by 100%, there are no rhinos left.
10	She should have multiplied by 2.25, as his pocket money is now 225% of what it was before the increase.