# Independent 

 Recap
## Fractions, Decimals and Percentages

## Year 6

## Arithmetic

1. $475,525+$ 526,007
2. $5,070 \div 65$
$\qquad$
3. $\frac{7}{9}-\frac{2}{3}$
4. $13 \%$ of 570

## Practice: Percentages of Amounts

5. Recap: Explain how to find a percentage of an amount.

For example, $15 \%$ of 50
6. If $50 \%=\frac{1}{2}$, work out these:
a. $50 \%$ of 240
b. $50 \%$ of 19
c. $50 \%$ of 7
7. If $25 \%=\frac{1}{4}$, work out these:
a. $25 \%$ of 36
b. $25 \%$ of 6
c. $75 \%$ of 12
8. If $20 \%=\frac{1}{5}$, work out these:
a. $20 \%$ of 35
b. $40 \%$ of 80
c. $60 \%$ of 700
9. If $10 \%=\frac{1}{10}$, work out these:
a. $10 \%$ of 9
b. $30 \%$ of 70
c. $90 \%$ of 120
11. If $5 \%=\frac{1}{20}$, work out these:
a. $5 \%$ of 80
b. $35 \%$ of 40
c. $65 \%$ of 200
12. Work out these:
a. $26 \%$ of 420
b. $72 \%$ of 810
c. $91 \%$ of 370
10. Describe at least two ways of finding $75 \%$ of an amount.
13. Harvey tries to find $65 \%$ of 20. This is his method: Find $10 \%(0.2)$, then add $50 \%(1)$, then add 5\% (0.1)
Explain his mistake.
14. A cereal box normally weighs 250 g.

The box says "30\% extra".

How many grams does the larger box weigh?
How many grams more is this compared to the normal box?

## Answers

| Q no. | Question | Answer |
| :---: | :---: | :---: |
| 1 | 475,525 + 526,007 | 1,001,532 |
| 2 | 5,070 $\div 65$ | 78 |
| 3 | $\frac{7}{9}-\frac{2}{3}$ | $\frac{1}{9}$ |
| 4 | $13 \%$ of 570 | 74.1 |
| 5 | Explain how to find a percentage of an amount. | There are several ways to find a percentage of an amount. Some pupils will find $10 \%$ or $1 \%$ or $50 \%$ and use these facts to find other percentages. Others will prefer to find the equivalent fraction to percentage then find the fraction of the amount. |
| 6 | $\begin{aligned} & 50 \% \text { of } 240,50 \% \text { of } 19 \text {, } \\ & 50 \% \text { of } 7 \end{aligned}$ | a. 120, b. 9.5, c. 3.5 |
| 7 | $\begin{aligned} & 25 \% \text { of } 36,25 \% \text { of } 6, \\ & 75 \% \text { of } 12 \end{aligned}$ | a. 9, b. 1.5, c. 9 |
| 8 | $\begin{aligned} & 20 \% \text { of } 35,40 \% \text { of } 80 \text {, } \\ & 60 \% \text { of } 700 \end{aligned}$ | a. 7, b. 32, c. 420 |
| 9 | $\begin{aligned} & 10 \% \text { of } 9,30 \% \text { of } 70, \\ & 90 \% \text { of } 120 \end{aligned}$ | a. 0.9, b. 21, c. 108 |
| 10 | Describe at least two ways of finding $75 \%$ of an amount. | Pupils' answers will vary. Some will find $10 \%$ and use this to find $70 \%$ and $5 \%$. Some will find $50 \%$, using this to find $25 \%$ and add them together. Some will find $50 \%$ then $25 \%$ and subtract $25 \%$ from the total. Accept any answers that would equate to $75 \%$ of an amount. |
| 11 | $\begin{aligned} & 5 \% \text { of } 80,35 \% \text { of } 40, \\ & 65 \% \text { of } 200 \end{aligned}$ | a. 4, b. 14, c. 130 |
| 12 | $\begin{aligned} & 26 \% \text { of } 420,72 \% \text { of } 810 \\ & , 91 \% \text { of } 370 \end{aligned}$ | a. 109.2, b. 583.2, c. 336.7 |
| 13 | Explain Harvey's mistake. | Harvey did not find $10 \%$ in his first calculation, instead he found 1\%. As he has then used this incorrect calculation to find $50 \%$ and $5 \%$, the rest of his answer is wrong. The answer should be 13. |
| 14 | How many grams does the larger box weigh? How many grams more is this compared to the normal box? | The larger box weighs 325 g . This is 75 g more. |

