

# 30 in 30 Guidance

|                                          |                                  |                                               |                                      |
|------------------------------------------|----------------------------------|-----------------------------------------------|--------------------------------------|
| ① $598 + 814$                            | 1412                             | ⑩ 5.15 pm to 9.40 pm<br>How many mins?        | 265mins                              |
| ② 2.8 8 2 5 4 4.<br>Mean average         | 4r5                              | ⑪ $82.64 + 52.49$                             | 135.13                               |
| ③ $68726 - 5297$                         | 63,429                           | ⑫ $\frac{7}{9} \div \frac{5}{8}$              | $\frac{56}{45}$ or $1\frac{11}{45}$  |
| ④ $\frac{4}{5} \times 7$                 | $\frac{28}{5}$ or $5\frac{3}{5}$ | ⑬ $25.6 - 15.6$                               | 10                                   |
| ⑤ $526 \div 6$                           | 87r4                             | ⑭ $6^2 + \underline{\hspace{1cm}} = 50 - 14$  | 0                                    |
| ⑥ $2459 + 52876$                         | 55,335                           | ⑮ $107.64 \div 100$                           | 1.0764                               |
| ⑦ $6 - 4.216$                            | 1.784                            | ⑯ $\frac{8}{10} \times 60$                    | $\frac{480}{10}$ or 48               |
| ⑧ $576 \div 5$                           | 115r1                            | ⑰ $568 \div 9$                                | 63r1                                 |
| ⑨ 5.16 5.61<br>5.6 5.1<br>Small to large | 5.1, 5.16, 5.6, 5.61             | ⑱ $45 \times 78$                              | 3510                                 |
| ⑩ $42 \times 56$                         | 2352                             | ⑲ Convert 17:30 to analogue time              | 5:30 pm                              |
| ⑪ $57 \times 5$                          | 285                              | ⑳ 34.28 34.56<br>34.7 34.68<br>Small to large | 34.28, 34.56, 34.68, 34.7            |
| ⑫ $10000 \times 200$                     | 2,000,000                        | ㉑ $\frac{2}{8} \times \frac{5}{6}$            | $\frac{10}{48}$ or $\frac{5}{24}$    |
| ⑬ $17 \times 2.5$                        | 42.5                             | ㉒ $\frac{8}{9} + \frac{7}{8}$                 | $\frac{127}{72}$ or $1\frac{55}{72}$ |
| ⑭ $8.426 + 9.215$                        | 17.641                           | ㉓ $\frac{6}{8} \times 9$                      | $\frac{54}{8}$ or $6\frac{3}{4}$     |
| ⑮ $6389 \div 6$                          | 1064r5                           | ㉔ $46 + 8 \times 7$                           | 102                                  |

$$\begin{array}{r} ① \quad 598 \\ + 814 \\ \hline 1412 \\ \hline \end{array}$$

- ② Mean average = add all numbers together then divide by the amount of numbers in the list

$$2 + 8 + 8 + 2 + 5 + 4 + 4 = 33$$

$$33 \div 7 = \underline{4 \text{ r } 5}$$

(Mode = the number that appears most in the list)

e.g. 7, 2, 4, 2, 1, 3, 2  
has a mode of 2)

(Median = put numbers in order and find the number in the middle)

e.g. 8, 4, 3, 1, 7, 2, 6  
= 1, 2, 3, (4), 6, 7, 8)

$$\begin{array}{r} ③ \quad 68726 \\ - 5297 \\ \hline 63429 \end{array}$$

④  $\frac{4}{5} \times \frac{7}{1} = \frac{28}{5}$  \* Write whole numbers as a fraction with a denominator of 1 then multiply the numerators then denominators

Can simplify to  $5\frac{3}{5}$

$$\begin{array}{r} ⑤ \quad 087 \text{ r } 4 \\ 6 \overline{) 526} \end{array}$$

$$\begin{array}{r} ⑥ \quad 2459 \\ + 52876 \\ \hline 55335 \end{array}$$

$$\begin{array}{r} ⑦ \quad 5\cancel{0}.\overset{9}{\cancel{0}}\overset{9}{\cancel{0}}\overset{0}{\cancel{0}} \\ - 4.216 \\ \hline 1.784 \end{array}$$

\* Write whole number as a decimal

$$\begin{array}{r} ⑧ \quad 115 \text{ r } 1 \\ 5 \overline{) 576} \end{array}$$

- ⑨ \* Can re-write all numbers to 2 decimal places to compare them more easily

$$\underline{5.10, 5.16, 5.60, 5.61}$$

$$\begin{array}{r} ⑩ \quad 42 \\ \times 56 \\ \hline 252 \\ 2100 \\ \hline 2352 \end{array}$$

$$\begin{array}{r} ⑪ \quad 57 \\ \times 5 \\ \hline 285 \end{array}$$

← In class we call this laying an egg! ☺

$$⑫ \quad 10000 \times 200 = 2,000,000$$

$$\begin{array}{r} ⑬ \quad 17 \\ \times 2.5 \\ \hline 85 \\ 340 \\ \hline 42.5 \end{array}$$

\* Place the decimal first before doing calculations

$$\begin{array}{r} 14 \quad 8.426 \\ + 9.215 \\ \hline 17.641 \\ \hline \end{array}$$

$$15 \quad \begin{array}{r} 1064r5 \\ 6 \overline{) 6389} \end{array}$$

$$16 \quad \begin{array}{l} 5.15_{pm} \rightarrow 6_{pm} = 45 \text{ mins} \\ 6_{pm} \rightarrow 9_{pm} = 180 \text{ mins} \\ 9_{pm} \rightarrow 9.40_{pm} = 40 \text{ mins} \end{array}$$

$$45 + 180 + 40 = \underline{265 \text{ minutes}}$$

$$17 \quad \begin{array}{r} 82.64 \\ + 52.49 \\ \hline 135.13 \\ \hline \end{array}$$

$$18 \quad \frac{7}{9} \div \frac{5}{8} \quad \text{Dividing fractions} \\ = \text{KFC}$$

Keep fraction

$$\frac{7}{9}$$

Flip fraction

$$\frac{8}{5}$$

Change the  
symbol to x

Then multiply the numerators,  
then multiply the denominators

$$\frac{7}{9} \times \frac{8}{5} = \frac{56}{45}$$

Can be simplified to  $\frac{11}{45}$

$$19 \quad \begin{array}{r} 25.6 \\ - 15.6 \\ \hline 10.0 \end{array}$$

$$20 \quad \begin{array}{l} 6^2 + \underline{\quad} = 50 - 14 \\ \downarrow \\ 36 + \underline{0} = 36 \end{array}$$

$$21 \quad 107.64 \div 100$$

$\div$  = move the decimal point  
to the left

$\times$  = move the decimal point  
to the right

(do this by the same amount  
of zeros in the number

e.g.  $\div 100$  = move 2 places  
to the left)

$$= \underline{1.0764}$$

$$22 \quad \frac{8}{10} \times \frac{60}{1} = \frac{480}{10} = \frac{48}{1} = 48$$

$$23 \quad \begin{array}{r} 063r1 \\ 9 \overline{) 568} \end{array}$$

$$24 \quad \begin{array}{r} 45 \\ \times 78 \\ \hline 360 \\ 3150 \\ \hline 3510 \end{array} \quad \leftarrow \text{lay an egg!}$$

$$25 \quad 17:30 = \underline{5:30_{pm}}$$

Make sure you  
include am/pm

$$26 \quad \underline{34.28, 34.56, 34.68, 34.70}$$

$$27 \quad \frac{2}{8} \times \frac{5}{6} = \frac{10}{48} = \frac{5}{24}$$

(28)

$$\left(\frac{8}{9}\right)^{\times 8} + \left(\frac{7}{8}\right)^{\times 9}$$

$$= \frac{64}{72} + \frac{63}{72} = \frac{127}{72}$$

Can be simplified to  
 $1\frac{55}{72}$

★ To add (or subtract) fractions, the denominator needs to be the same. We do this by multiplying the whole fraction, usually by the denominator of the other fraction.

(29)

$$\frac{6}{8} \times \frac{9}{1} = \frac{54}{8} = 6\frac{6}{8} = 6\frac{3}{4}$$

(30)

$$46 + \underbrace{8 \times 7}$$

$$46 + 56 = \underline{102}$$

Brackets  
Order  
Division  
Multiplication  
Addition  
Subtraction