

# FY Starter 03/03

Malvern College

1: Find the HCF of:

108 and 360

2: Find the LCM of:

6 and 10

3: Work out the following, showing your method and simplifying your answer:

$$3\frac{2}{9} - 1\frac{7}{8}$$

4: Work out the following, showing your method and simplifying your answer:

$$1\frac{3}{4} \times 1\frac{1}{5}$$

5: Multiply out and simplify the following:

$$2(2s + 1) + 3(9s + 2)$$

6: Multiply out and simplify the following:

$$(q - 1)(q + 3)$$

7: Multiply out and simplify the following:

$$(z + 7)^2$$

8: Solve the following:

$$8m - 4 = -4$$

9: Solve the following:

$$8 = \frac{r + 22}{4}$$

10: Find a formula for the  $n$ th term:

10, 17, 24, 31, 38, ...

11: Work out the following:

What is 69% of 670 mm?

12: Work out the following:

Decrease  $95 \text{ m}^3$  by 32%

13: Find the percentage increase or decrease from the first value to the second value:

96 m, 156.48 m

14: Calculate the following to the nearest £0.01.

The value after 2 years of £251,000.00 invested at 17% p/a compound interest.

15: Work out the following:

If a computer is reduced by 13% in a sale to £85.26, find the original price.

# Answers: FY Starter 03/03

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1: 36

2: 30

3:  $3\frac{16}{72} - 1\frac{63}{72} = 1\frac{25}{72}$

4:  $\frac{7}{4} \times \frac{6}{5} = \frac{7}{2} \times \frac{3}{5} = \frac{21}{10} = 2\frac{1}{10}$

5:  $4s + 2 + 27s + 6 = 31s + 8$

6:  $q^2 + 2q - 3$

7:  $z^2 + 14z + 49$

8:  $8m - 4 = -4$  [ + 4 ]  
 $8m = 0$  [  $\div 8$  ]  
 $m = 0$

9:  $\frac{r + 22}{4} = 8$  [  $\times 4$  ]  
 $r + 22 = 32$  [ - 22 ]  
 $r = 10$

10:  $t_n = 7n + 3$

11: 462.3 mm

12:  $64.6 \text{ m}^3$

13: 63% increase

14: £343,593.90

15: £98.00