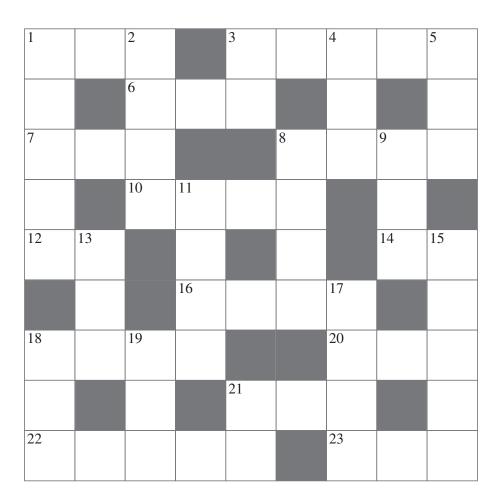
## Team Maths Challenge 2017 National Final





## Across

8. 
$$8^4 + 6^3 + 4^2 + 2^1$$
 (4)

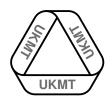
14. 
$$x$$
, where  $\frac{22}{2x+2} = \frac{1}{3}$  (2)

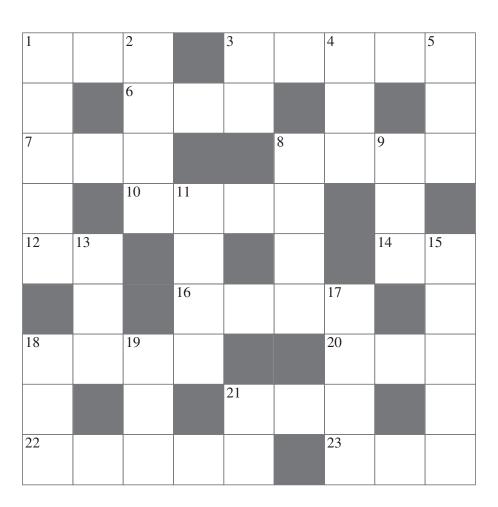
16. 
$$18 \text{ Down} \times 21 \text{ Down}$$
 (4)

18. 
$$x$$
, where 72 :  $x = 1 : 48$  (4)

22. 
$$3 \text{ Down} \times 6 \text{ Across} + 13 \text{ Down}$$
 (5)

## Team Maths Challenge 2017 National Final





## Down

- 1. The mean of this number and 18 Across is 3 Across (5)
- 11. The sum of the digits is the same as that of 10 Across (4)
- 2. x, where x:13=96:1 (4)
- 13. A multiple of 13 (3)
- 3. The 12th prime number (2)
- 15.  $13 \text{ Down} \times 21 \text{ Across}$  (5)
- 4. A triangular number (3)
- 17.  $1^1 + 2^2 + 3^3 + 4^4 + 5^5$  (4)
- 5. A square plus 20 Across (3)
- 18. The sum of the digits of this column is a square (3)
- 8. A multiple of 4 Down (4)
- 19. A square plus 21 Across (3)
- 9. A cube (3)
- 21. x, where  $\frac{180}{3x+3} = \frac{5}{2}$  (2)

Crossnumber **RESPONSE SHEET** TEAM MATHS CHALLENGE 2017 NATIONAL FINAL TEAM NUMBER SCHOOL NAME Row TOTALS 10 13 15 16 17 18 20 21 22 23 Final score /60 **Correct digit:** place a tick in the dotted circle. Incorrect digit: cross out the answer, write in the correct digit, and place a cross in the dotted circle.

**Row totals:** enter the number of ticks in each row.