



Mentals

1. $85 + 55 + 34 =$	2. $43 - 26 =$	3. $49 \div 7 =$	4. $4 \times 8 =$
5. $36 \times 2 =$	6. Round 5112 to the nearest hundred	7. What is the value of the number in the hundreds place in 34180?	8. Complete this counting pattern: 67, 73, 79, 85, _____, _____, _____
9. Complete this counting pattern: 80, 84, 88, 92, _____, _____, _____	10. If there were 147 fan at a tennis game, 92 were wearing pink and the rest were wearing blue, how many were wearing blue?	11. What is the average of 6, 6 and 3?	12. What is the price after taking 25% off \$51?
13. What is $\frac{1}{6}$ of 48?	14. What is $\frac{1}{11}$ of 121?	15. $0.22 \times 10 =$	16. Write these decimals in ascending order: 0.10, 0.90, 0.32, 0.72
17. What digital time does the clock show? 	18. The perimeter of a square is 4cm. What is its area?	19. What type of angle is this? 	20. How many minutes from 2:30am to 10:30pm?

Patterns and Algebra

1. Use BODMAS to solve the following:

a) $12 \times \left(\frac{1}{2} \text{ of } 16\right) + 22 =$

b) $(48 + 6) - (72 \div 12) =$

c) $13 \times (11 - 8) \div 3 =$

d) $10 \times 0.1 \times (26 + 46) + 4 =$

e) $\frac{1}{3} \text{ of } (5 \times 15) + 10 =$

f) $(8 \times 0.5) + (28 - 12) =$

g) $(108 \div 12) \div \left(\frac{1}{6} \text{ of } 18\right) =$

h) $5 \times 0.2 + 28 - 9 =$

i) $180 \div 2 \times 4 + 6 =$

j) $(9 + 4) \times 2 \div 4 =$

k) $16 \div 2 \times 3 \div 4 =$

l) $7 + 7 \div 7 + 7 \times 7 - 7 =$

m) $(24 \div 2^2) - 5 =$

n) $3^2 \times 7 + 99 =$

o) $(105 + 206) - 550 \div 5^2 + 10 =$

2. Using the **balance strategy**, solve each equation and then match the letters to the answers to solve this riddle: *What gets wetter and wetter the more that it dries?* The first one has been done for you.

O $x + 9 = 14$

E $y - 5 = 29$

A $a + 7 = 15$

$$x + \cancel{9} - \cancel{9} = 14 - 9$$

$$x = 5$$

W $m + 5 = 19$

T $y + 8 = 25$

L $8 + x = 24$

8	17	5	14	34	16

3. For each question, write an equation using the pronumeral y for the mystery number and then solve it.

a) A mystery number doubled is 64.

b) The difference between a mystery number and 19 is 42.

4. Use algebra to solve. Show all working out.

Aditya is six years older than Alice. Six years ago, she was twice as old as he. How old is Aditya now? How old is Alice now?