

May Daily Tasks Days 15 - 21

15. Expand the brackets and simplify:

a) $(x + 3)(x - 7)(x + 2)$ b) $(x + 3)(x - 2)^2$ c) $(2x + 1)(x - 3)(x - 4)$

16. Solve each inequality

a) $4(3 - x) < 3x + 40$ b) $6x + 10 \leq 2(5x - 7)$ c) $3x - 2 > 6x + 7$

17. Evaluate:

a) $2\frac{1}{4} - 1\frac{2}{7}$ b) $\frac{7}{9} \div 1\frac{2}{3}$ c) $2\frac{1}{2} \times (1\frac{2}{5} - \frac{3}{4})$ d) $\frac{5}{6}$ of $1\frac{3}{10} - \frac{4}{5}$

18. A function has equation

$$f(x) = 2x^3 - 3.$$

a) Evaluate i) $f(4)$. ii) $f(-2)$

b) If $f(t) = 51$, find the value of t

19. Find the equation of the straight line passing through each pair of points:

a) (3,-1) ; (4,2) b) (-1,9) ; (-2,3) c) (4,5) ; (1, 9)

20. Write down the gradient and y-intercept of each line using their equations below

a) $3x - 5y + 10 = 0$ b) $4x + 3y - 12 = 0$ c) $5x - 2y - 10 = 0$

21. Solve the system of equations shown here

a) $3x + 2y = 2$ b) $4x - 3y = -4$ c) $2x + 5y = 8$

$$4x - 3y = 31 \quad 3x - y = 2 \quad 3x + 2y = 1$$