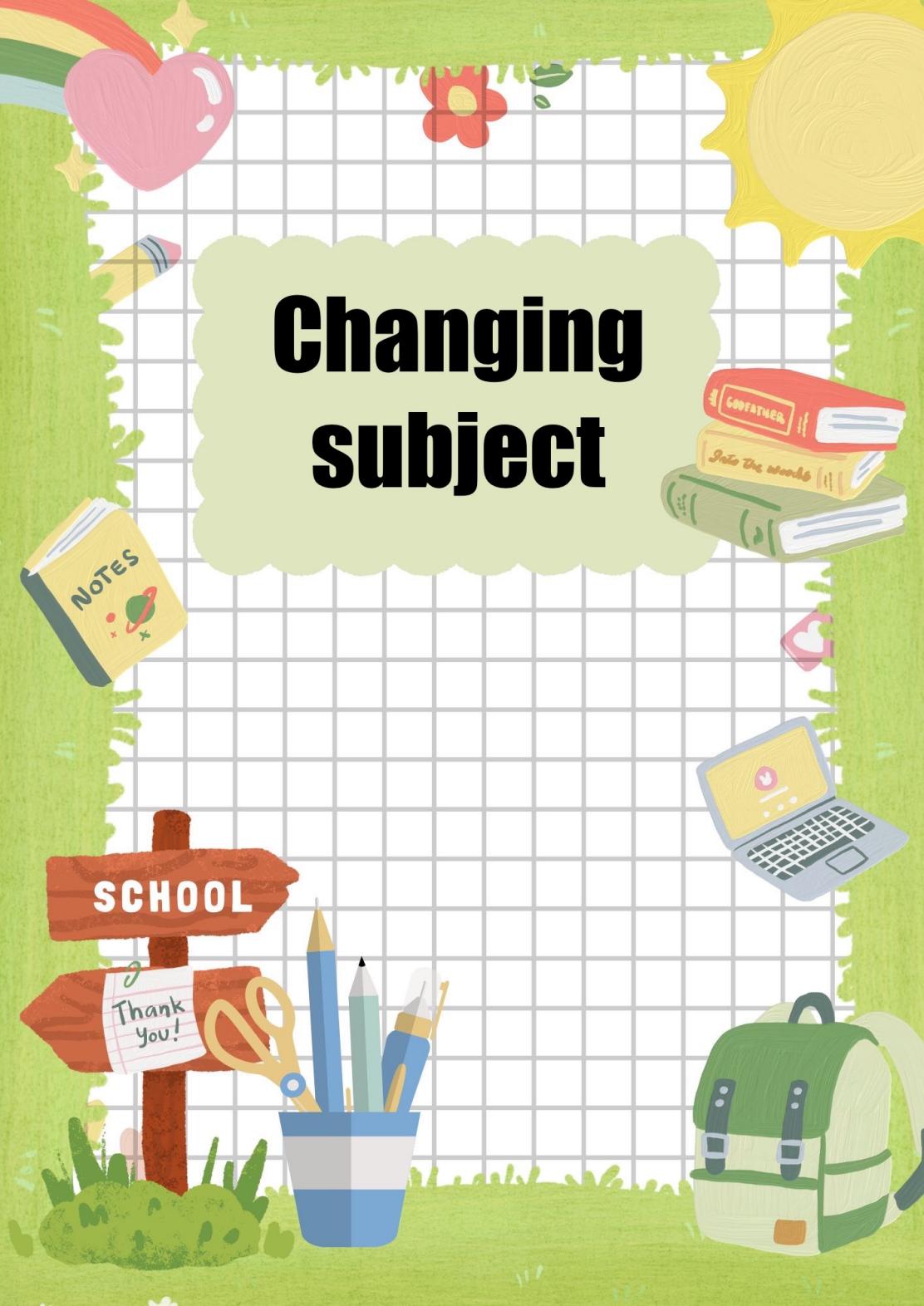


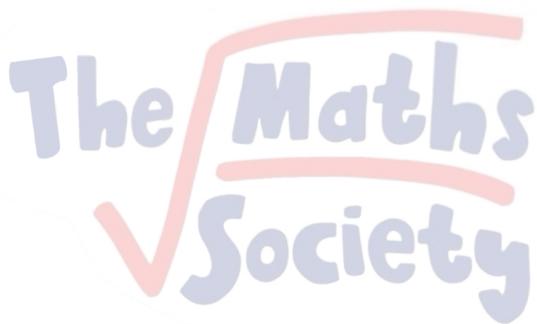
Changing subject



1. Make b the subject of $a = \sqrt{\frac{3b+5}{b-d}}$

$$a^2 = \frac{3b+5}{b-d}$$

$$\begin{aligned}a^2b - a^2d &= 3b + 5 \\a^2b - 3b &= 5 + a^2d \\b(a^2 - 3) &= 5 + a^2d \\b &= \frac{5 + a^2d}{a^2 - 3}\end{aligned}$$



2. Make h the subject of $2(h - 6) = 4g + 2$

$$\begin{aligned}h - 6 &= 2g + 1 \\h &= 2g + 1 + 6 \\h &= 2g + 7\end{aligned}$$

3. Make u the subject of

$$\begin{aligned}s &= ut + \frac{1}{2}at^2 \\ ut &= s - \frac{1}{2}at^2 \\ u &= \frac{s - \frac{1}{2}at^2}{t} \\ &\rightarrow \frac{s}{t} - \frac{1}{2}at \leftarrow\end{aligned}$$

4. Make x the subject of $y = tx + 4y^2$

$$\begin{aligned}tx &= y - 4y^2 \\ x &= \frac{y - 4y^2}{t}\end{aligned}$$

5. Make x the subject of the formula $y = 5 + \frac{3x+4}{7-x}$
Give your answer in its simplest form.

$$y = 5 + \frac{3x+4}{7-x}$$

$$y - 5 = \frac{3x+4}{7-x}$$

$$(y-5)(7-x) = 3x+4$$

$$7y - xy - 35 + 5x = 3x + 4$$

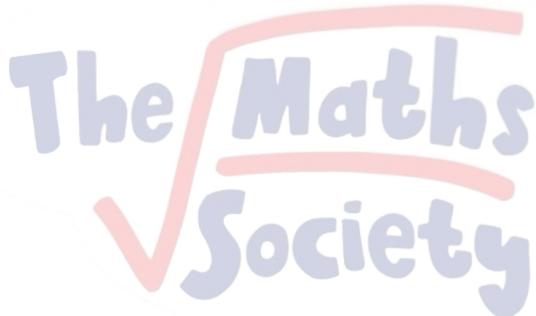
$$-2x + 4 = 7y - 35 - xy$$

$$-2x + xy = 7y - 35 - 4$$

$$-2x + xy = 7y - 39$$

$$x(-2+y) = 7y - 39$$

$$x = \frac{7y-39}{-2+y}$$



6. Make a the subject of the formula $B = ac + de$

$$\begin{aligned}B - de &= ac \\a &= \frac{B - de}{c}\end{aligned}$$