

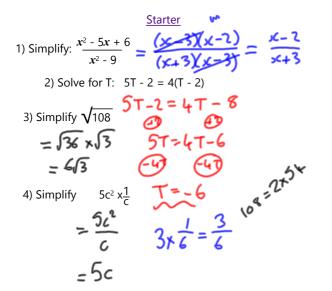
Today's Learning:

To solve linear equations.

| | | Solving Linear Equations | |
|----------------------------|--|--|---|
| | | Always do the same to both sides. | |
| <u>Challenge</u> | 2(b + 4) = b - 7 | e.g. 1) 10(h - 5) = 2(3 - h) 10h - 50 = 6-2h | 2) $\frac{m}{10}$ + 3 = 2 - 5m, + |
| chanenge | 2L + 8 = h - 7 | Co Co | m + 30 = 20 - 50m |
| Solve this equation for b: | 2b + 8 = b - 7 -3b - 5b - 7b - 7b - 7b - 7b - 7b - 7b - 7 | 10h -56 = -2h $-10h$ $-56 = -12h$ $(-10h)$ $-56 = -12h$ (-12) (-12) -32 -12 $= h$ -52 -32 $= h$ -52 -12 -52 -12 -12 -52 -1 | $\begin{array}{c} 10 = 20 = 500 \\ 30 = 20 - 51m \\ \hline \hline 0 = -51m \\ \hline \hline -30 \\ \hline -51 $ |
| | | h=3 | |

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T70.5



Today's Learning:

To solve algebraic inequations.

| Solving Inequations | <u>Challenge</u> Solve for T: | -4T + 1 < -2T |
|---|----------------------------------|---------------------|
| < means less than | -4T+1<-2T | Θ Θ |
| > means greater than | (+4) (4) | -4TZ-2T-1 |
| ≤ means less than or equal to | | |
| means greater than or equal to | 1<2T | |
| \bigstar To solve an inequation, we treat the inequality like an equals | | -272-1 |
| sign, except when we multiply or divide by a negative number. | 251 | 🔄 🕑 |
| | | $T > \frac{-1}{-2}$ |

e.g. 1)
$$3a + 7 > a - 3$$

 $2a + 7 > -3$
 $2a + 7 > -3$
 $2a - 10$
 $2a - 2x + 12$
 $-2x - 4$
 $2a - 2x - 2$
 $x > 2$

Solve these inequations: a) 3w - 3 > 2w + 7 b) 3 - 2x < 16 + x - 4W > 10 y = y - 3

1) Factorise m² - 11m + 24 (m - 6)(m - 3) 2) Simplify: $\frac{3b}{4a} \times \frac{2a}{b} = \frac{6ab}{4ab} = \frac{3ab}{2ab} = \frac{3}{2}$ 3) Find the gradient of the straight line joining (-2, 4) and (1, 7). (1, 7). 4) Simplify: $\frac{2e^3 \times 3e^2}{6e^4} = \frac{3}{2} = 1$ $= \frac{6e^5}{6e^4} = \frac{e^5}{e^4} = e^1 = e$

(a)
$$2a+18 \le 12+4a$$
 (b) $14-3x > x+6$
(c) $3(p-2) \ge 5p-10$ (d) $7(2-d) \le 2(d-12)$
(e) $4(3-4h) < 12+h$ (f) $2(2y-1)-8 > 10(1+y)$
(g) $16-3k < 20-k$ (h) $3(2-y) > 2(1+3y)-7$
 $k > -2$ $y < \frac{4}{3}$