
ALGEBRA: REARRANGING FORMULAS**Best Guess Mastery Worksheet (Target Grade 5/6)****I Do**

Make c the subject of $t = 4c + d$

$c =$

We Do

Make x the subject of $y = 5x - 2m$

$x =$

ALGEBRA: REARRANGING FORMULAS**Best Guess Mastery Worksheet (Target Grade 5/6)****You Do 1**

Make u the subject of $v = u + at$

$u =$

You Do 2

Make p the subject of $m = \frac{p + 3}{4}$

$p =$

ALGEBRA: REARRANGING FORMULAS (POWERS & ROOTS)**Best Guess Mastery Worksheet (Target Grade 6/7)****Challenge 1**

Make x the subject of $y = \frac{\sqrt{(x+5)}}{3} - 2$

 $x = \dots\dots\dots$ **Challenge 2**

Make x the subject of $p = \sqrt{\left(\frac{3x^2+4}{5}\right)}$

 $x = \dots\dots\dots$

Answers & Worked Solutions

I Do:

1. Subtract d from both sides: $t - d = 4c$
2. Divide by 4: $\frac{t - d}{4} = c$
3. Final Answer: $c = \frac{t - d}{4}$

We Do:

1. Add $2m$ to both sides: $y + 2m = 5x$
2. Divide by 5: $\frac{y + 2m}{5} = x$
3. Final Answer: $x = \frac{y + 2m}{5}$

You Do 1:

1. Subtract at from both sides: $v - at = u$
2. Final Answer: $u = v - at$

You Do 2:

1. Multiply both sides by 4: $4m = p + 3$
2. Subtract 3 from both sides: $4m - 3 = p$
3. Final Answer: $p = 4m - 3$

Challenge 1:

1. Add 2 to both sides: $y + 2 = \frac{\sqrt{(x + 5)}}{3}$
2. Multiply by 3: $3(y + 2) = \sqrt{(x + 5)}$
3. Square both sides: $[3(y + 2)]^2 = x + 5 \rightarrow 9(y + 2)^2 = x + 5$
4. Subtract 5: $9(y + 2)^2 - 5 = x$
5. Final Answer: $x = 9(y + 2)^2 - 5$ (or $x = 9y^2 + 36y + 31$)

Challenge 2:

1. Square both sides to remove the root: $p^2 = \frac{3x^2 + 4}{5}$

2. Multiply by 5: $5p^2 = 3x^2 + 4$

3. Subtract 4: $5p^2 - 4 = 3x^2$

4. Divide by 3: $\frac{5p^2 - 4}{3} = x^2$

5. Square root both sides: $x = \pm\sqrt{\frac{5p^2 - 4}{3}}$