

ALGEBRA RARITIES PQC'S

REARRANGING FORMULAS

①

Make r the subject of the formula $m = 9r + 4$.

$$m - 4 = 9r$$

$$\frac{m - 4}{9} = r$$

[2]

②

Rearrange the formula $e = 4f - 3$ into the form $f = \dots$

$$e + 3 = 4f$$

$$\frac{e + 3}{4} = f$$

[2]

INEQUALITIES

③

Solve the inequality $6x > 2x + 9$.

$$6x - 2x > 9$$

$$4x > 9$$

$$x > \frac{9}{4}$$

[2]

INDICES

④

Simplify $a^5 \times a^2$.

$$a \times a \times a \times a \times a \times a \times a = a^7$$

[1]

⑤

Simplify $\frac{m^4 \times m^5}{m^3}$.

$$= \frac{m \times m \times m \times m \times m \times m \times m \times m \times m \times m \times m}{m \times m \times m}$$

$$= m^6$$

[1]

FACTORSING PQ'S

6

Factorise $4x - 6$.

$$\begin{aligned} & 2 \times 2 \times x - 2 \times 3 \\ & 2(2x - 3) \end{aligned}$$

[1]

7

Factorise $y^2 - 4y$.

$$\begin{aligned} & y \times y - 4 \times y \\ & y(y - 4) \end{aligned}$$

[1]