(Making Subject)

Rearrange this formula to make the letter in the brackets the subject

(a) $y = \frac{x}{3} + 5$ (x) [2]

(b) J = mv – mu (m) [2]

(c) A = $\pi rl + \pi r^2$ (l) [2]

(d) 2(w + h) = P (w) [2]

(e) p = $2q^2$ (q) [2]

(f) A = $(2\pi + y)x^2$ (x) [2]

g) $x = y + \sqrt{a}$ (a) [2]

(h) $y = x^2 + 2$ (x) [2]

(i) $v = \frac{1}{3}Ah$

(i) Find V when A = 15 and h = 7. [1]

(ii) Make h the subject of the formula. [2]

(j) $x = p^2 - q^2$ [1]

(i) Find the x when p = 7 and q = 9. [1]

(ii) Make q the subject of the formula. [2]

(k) $T = 2\pi\sqrt{\frac{l}{g}}$

(i) Find T when g = 9.8 and ℓ = 2. [2]

(ii) Make g the subject of the formula [3]

(l) $v = \sqrt[3]{p + r}$ (r) [2]

(m) $y = 2 + \sqrt{x - 8}$ (x) [3]

(n) $y = \sqrt{x^2 + 1}$ (x) [3]

(o) $c = \sqrt{a^2 + b^2}$ (b) [3]

(p) rp + 5 = 3p + 8r (p) [3]

(q) $s = ut + \frac{1}{2}at^2$ (a) [3]

(r) $y = (x - 4)^2 + 6$ (x) [3]

(s) $y = \frac{(x+3)^2}{5}$ (x) [3]

(t) t = 2 - $\frac{3w}{a}$ (w) [3]

(u) A = $\pi x^2 - \pi y^2$ (y) [3]

(v) $4A = 4k^2 - \pi k^2$ (k) [3]

(w) $c = \frac{4}{a-b}$ (a) [3]

(x) c = $\frac{5d+4w}{2w}$ (d) [3]

(y) $A = \frac{r(y+2)}{5}$ (y) [3]

(z) $A = P + \frac{PRT}{100}$ (P) [3]

(A) $w = \frac{1}{\sqrt{LC}}$ (c) [3]

(B) c = $\frac{4+w}{w+3}$ (w) [4]

(C) $y = \sqrt{8 + \frac{4}{x}}$ (x) [4]

(D) $x = \frac{3m}{2-m}$ (m) [4]

(E) $P = \frac{k+m}{m}$ (m) [4]

(F) $P = \frac{x+3}{x}$ (x) [4]

(G) 3m + xy = $\frac{x\,p}{4}$ (x) [4]

(H) $y = \frac{x+2}{x-4}$ (x) [4]

Fundoo Tutor Focused on You.



Fundoo Tutor
Focused. On You.

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/



Fundoo Tutor
Focused. On You.

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/



Fundoo Tutor
Focused. On You.

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/



ANSWERS:

a) $3(y - 5)$ b) $J / (v - u)$ c) $(A - \pi r^2)/\pi r$ d) $(P/2) - h$

e) $\pm\sqrt{\frac{p}{2}}$ f) $\pm\sqrt{\frac{A}{2\pi+y}}$ g) $(x - y)^2$ h) $\pm\sqrt{(y - 2)}$

i)i) 35 ii) $3v/A$ j) i) –32 ii) $\pm\sqrt{(p^2 - x)}$ k) i) 2.84 ii) $4\pi^2 l/T^2$

l) $v^3 - p$ m) $(y - 2)^2 + 8$ n) $\pm\sqrt{y^2 - 1}$ o) $\pm\sqrt{c^2 - a^2}$

p) $(5 - 8r)/(3 - r)$ and $(8r - 5)/(r - 3)$ q) $2(s - ut)/t^2$ r) $\pm\sqrt{y - 6} + 4$

s) $\pm\sqrt{5y} - 3$ t) $w = a(2 - t)/3$ u) $\pm\sqrt{\frac{\pi x^2 - A}{\pi}}$ v) $\pm\sqrt{\frac{4A}{4-\pi}}$

w) $4/c + b$ x) $(2wc - 4w)/5$ y) $5A/r - 2$ z) $100A/(100 + RT)$

A) $1/w^2L$ B) $(4 - 3c)/(c - 1)$ or $(3c - 4)/(1 - c)$ C) $4/ (y^2 - 8)$

D) $2x / (3 + x)$ E) $k/(P - 1)$ F) $3/(p - 1)$ G) $12m/ (p - 4y)$

H) $2(1 + 2y)/(y - 1)$

Fundoo Tutor offers personalized coaching for IGCSE, IB, and SAT students. Need a tutor? http://fundootutor.com/book-a-call/