Answer Key HW #

1. $ax - b = c$

$ax = c + b$

$x = \frac{c+b}{a}$

2. $\frac{x}{a} + b = c$

$\frac{x}{a} = (c - b)a$

$x = a(c - b)$

3. $(a-3)x = b$

$x = \frac{b}{a-3}$

4. $\frac{ax}{b} = c$

$x = \frac{cb}{a}$

5. $\frac{x-a}{b} = c$

$x - a = bc$

$x = bc + a$

6. $\frac{ax}{b} = c$

$ax = bc$

$x = \frac{bc}{a}$

7. $b = ax - c + d$

$b + c - d = ax$

$\frac{b+c-d}{a} = x$

8. $c = \frac{ax - b}{d}$

$cd = ax - b$

$cd + b = ax$

$\frac{cd+b}{a} = x$

9. $abx = c$

$x = \frac{c}{ab}$

10. $\frac{3x}{a+b} = c$

$3x = c(a+b)$

$x = \frac{c(a+b)}{3}$

11. $A = \frac{1}{2}bh$

$2A = bh$

$\frac{2A}{h} = b$

12. $c = \frac{a+y}{4b}$

$4bc = a + y$

$4bc - a = y$

13. $r = q + pq$ or $r = q(1+p)$

$r - q = pq$

$\frac{r-q}{q} = p$

$\frac{r}{q} - 1 + p$

$\frac{r}{q} - 1 = p$

14. $c = i(h - j)$

$c = hi - ji$

$c + ji = hi$

$\frac{c + ji}{i} = h$

or $\frac{c}{i} + j = h$

15. $\frac{p}{r+q} = \frac{a}{t}$

$pt = a(r+q)$

$\frac{pt}{a} = r + q$

$\frac{pt}{a} - q = r$

16. $ax + bx = c$

$x(a+b) = c$

$x = \frac{c}{a+b}$

17. $m = \frac{x+y+z}{3}$

$3m = x + y + z$

$3m - x - z = y$

18. $V = \frac{1}{3}Bh$

$3V = Bh$

$\frac{3V}{h} = B$

19. $2s = n(a+1)$

$\frac{2s}{n} = a + 1$

$\frac{2s}{n} - 1 = a$

20. $S = \frac{a}{a-r}$

$s(a-r) = a$

$a - r = \frac{a}{s}$

$-r = \frac{a}{s} - a$

$r = -\frac{a}{s} + a$