

Workout

Question 1

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|----------------|---------------|---------------|
| (a) $w = 2$ | (b) $c = 8$ | (c) $a = 7$ |
| (d) $x = 9$ | (e) $x = 9$ | (f) $w = 4$ |
| (g) $x = 9$ | (h) $w = 12$ | (i) $x = 28$ |
| (j) $y = 6$ | (k) $x = 30$ | (l) $x = 17$ |
| (m) $x = 16$ | (n) $m = 48$ | (o) $w = 50$ |
| (p) $x = 50$ | (q) $y = 5$ | (r) $x = 5.5$ |
| (s) $b = -2$ | (t) $x = 4.5$ | (u) $y = 2.5$ |
| (v) $g = 3.7$ | (w) $a = 4$ | (x) $v = -8$ |
| (y) $w = 10.8$ | (z) $y = 4.8$ | |

Question 2

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|--------------|--------------|---------------|
| (a) $x = 3$ | (b) $w = 5$ | (c) $y = 4$ |
| (d) $x = 3$ | (e) $c = 10$ | (f) $m = 3$ |
| (g) $w = 11$ | (h) $p = 4$ | (i) $I = 8$ |
| (j) $a = 6$ | (k) $x = 12$ | (l) $w = 0$ |
| (m) $x = 4$ | (n) $w = 13$ | (o) $x = 12$ |
| (p) $c = 20$ | (q) $x = 60$ | (r) $n = 81$ |
| (s) $x = 84$ | (t) $c = 96$ | (u) $x = 225$ |

Question 3

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|---------------|---------------|---------------|
| (a) $m = 3.5$ | (b) $w = 4.8$ | (c) $x = 0.5$ |
| (d) $w = 1.6$ | (e) $x = 3.5$ | (f) $x = -2$ |
| (g) $w = -3$ | (h) $w = 1.5$ | (i) $c = -7$ |
| (j) $x = -15$ | (k) $w = -10$ | (l) $m = -64$ |
| (m) $x = 24$ | (n) $m = 36$ | (o) $x = -12$ |

Question 4

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|--------------|--------------|--------------|
| (a) $x = 17$ | (b) $x = 35$ | (c) $m = 23$ |
| (d) $x = 9$ | (e) $x = 50$ | (f) $x = 16$ |
| (g) $x = 35$ | (h) $x = 6$ | (i) $x = 40$ |

(j) $m = 7$ (k) $x = 8$ (l) $x = 15$

Question 5

(a) $y = 11$ (b) $x = 8$ (c) $x = 3$

(d) $m = 6$ (e) $x = 6$ (f) $x = -2$

(g) $a = 4$ (h) $f = 3.5$ (i) $g = 1.75$

Apply

Question 1) $2x = 6$, $3x = 9$, $4x = 12$, $x+1 = 4$, $x+2 = 5$ etc.

Question 2) (a) $x + 3 = 19$ (b) $x = 16$

Question 3) (a) $3n = 48$ (b) $n = 16$

Question 4) (a) $7n + 3 = 45$ (b) $n = 6$

Question 5) (a) $4x + 30 = 150$ (b) $x = 30$ (c) 45 metres

Question 6) (a) $3x + 63 = 180$ (b) $x = 39$

Question 7) $a = 6$, $b = 8$, $c = 7$, $d = 10$