Skill 22.3 Substituting into various expressions.

2 3 4

Q. If $c = 4$, find the value of: $3c + 1$	**A.** $3c + 1$ $= 3 \times c + 1$ $= 3 \times 4 + 1$ $= 12 + 1$ $= 13$	*Expand 3c to 3 × c.* *Substitute c with 4.* *Multiply 3 by 4.* *Add 12 and 1.*
Q. If $a = 4$ and $b = 6$, find the value of: $2ab$	**A.** $2ab$ $= 2 \times a \times b$ $= 2 \times 4 \times 6$ $= 8 \times 6$ $= 48$	*2ab is the short expression for 2 × a × b* *Substitute a with 4 and b with 6.* *Working from left to right, multiply 2 by 4.* *Then multiply 8 by 6.*

a) If $a = 4$, find the value of: $4a$

$= 4 \times a$

$= 4 \times 4$

$= 16$

b) If $m = 3$, find the value of: $2m$

= .....

= .....

= .....

c) If $j = 7$, find the value of: $5j$

= .....

= .....

= .....

d) If $h = 3$, find the value of: $4h - 10$

$= 4 \times h - 10$

$= 4 \times 3 - 10$

$= 12 - 10$

$= 2$

e) If $p = 4$, find the value of: $2p + 5$

= .....

= .....

= .....

= .....

f) If $k = 7$, find the value of: $3k - 12$

= .....

= .....

= .....

= .....

g) If $t = 3$ and $u = 2$, find the value of: $2tu$

$= 2 \times t \times u$

$= 2 \times 3 \times 2$

$= 6 \times 2$

$= 12$

h) If $y = 5$ and $z = 4$, find the value of: $2yz$

= .....

= .....

= .....

= .....

i) If $q = 3$ and $r = 7$, find the value of: $3qr$

= .....

= .....

= .....

= .....