

# 21. [Substitution]

## Skill 21.1 Substituting one value into expressions involving + and -

MMBlue 1 1 2 2 3 3 4 4  
MMGreen 1 1 2 2 3 3 4 4

- Substitute the letters with numbers.
- Use the order of operations rule: Add (+) and/or subtract (-) from left to right.

**Q.** If  $a = 5$ , find the value of  $13 - a$

**A.**  $13 - a$  ← substitute  $a = 5$   
 $= 13 - 5$   
 $= 8$

**a)** If  $p = 2$ , find the value of  $5 + p$

$= 5 + 2 = \boxed{7}$

**b)** If  $f = 3$ , find the value of  $6 + f$

$= \dots = \boxed{\phantom{00}}$

**c)** If  $c = 4$ , find the value of  $4 + c$

$= \dots = \boxed{\phantom{00}}$

**d)** If  $m = 5$ , find the value of  $m + 3$

$= \dots = \boxed{\phantom{00}}$

**e)** If  $g = 7$ , find the value of  $g + 2$

$= \dots = \boxed{\phantom{00}}$

**f)** If  $z = 6$ , find the value of  $z + 1$

$= \dots = \boxed{\phantom{00}}$

**g)** If  $x = 3$ , find the value of  $x + x$

$= \dots = \boxed{\phantom{00}}$

**h)** If  $v = 4$ , find the value of  $v + v$

$= \dots = \boxed{\phantom{00}}$

**i)** If  $q = 7$ , find the value of  $q + q$

$= \dots = \boxed{\phantom{00}}$

**j)** If  $t = 5$ , find the value of  $t + t + t$

$= \dots = \boxed{\phantom{00}}$

**k)** If  $e = 6$ , find the value of  $e + e + e$

$= \dots = \boxed{\phantom{00}}$

**l)** If  $p = 8$ , find the value of  $p + p + p$

$= \dots = \boxed{\phantom{00}}$

**m)** If  $j = 9$ , find the value of  $j + j - 8$

$= \dots = \boxed{\phantom{00}}$

**n)** If  $k = 7$ , find the value of  $k + k + 6$

$= \dots = \boxed{\phantom{00}}$

**o)** If  $h = 8$ , find the value of  $4 + h + h$

$= \dots = \boxed{\phantom{00}}$

**p)** If  $m = 8$ , find the value of  $m + m - 9$

$= \dots = \boxed{\phantom{00}}$

**q)** If  $s = 6$ , find the value of  $9 + s + s$

$= \dots = \boxed{\phantom{00}}$

**r)** If  $n = 5$ , find the value of  $8 + n + n$

$= \dots = \boxed{\phantom{00}}$

- Substitute the letters with numbers.
- Use the order of operations rule: Multiply ( $\cdot$ ) and/or divide ( $\div$ ) from left to right.

**Q.** If  $m = 4$ , find the value of  $6m$

**A.**  $6m$   $\leftarrow$  substitute  $m = 4$   
 $= 6 \cdot 4$   
 $= 24$

**a)** If  $a = 6$ , find the value of  $9 \cdot a$

$= 9 \cdot 6$   $=$

**b)** If  $n = 4$ , find the value of  $3 \cdot n$

$=$

**c)** If  $y = 5$ , find the value of  $2 \cdot y$

$=$

**d)** If  $w = 7$ , find the value of  $w \cdot 3$

$=$

**e)** If  $p = 8$ , find the value of  $4 \cdot p$

$=$

**f)** If  $z = 6$ , find the value of  $7 \cdot z$

$=$

**g)** If  $a = 3$ , find the value of  $8a$

$=$

**h)** If  $h = 2$ , find the value of  $9h$

$=$

**i)** If  $n = 5$ , find the value of  $7n$

$=$

**j)** If  $m = 32$ , find the value of  $m \div 4$

$=$

**k)** If  $n = 7$ , find the value of  $42 \div n$

$=$

**l)** If  $k = 3$ , find the value of  $36 \div k$

$=$

**m)** If  $d = 9$ , find the value of  $81 \div d$

$=$

**n)** If  $p = 8$ , find the value of  $64 \div p$

$=$

**o)** If  $i = 6$ , find the value of  $42 \div i$

$=$

**p)** If  $m = 7$ , find the value of  $56 \div m$

$=$

**q)** If  $e = 20$ , find the value of  $\frac{e}{5}$

$=$

**r)** If  $w = 9$ , find the value of  $\frac{108}{w}$

$=$

### Skill 21.3 Substituting one value into expressions involving +, −, · and ÷

- Substitute the variable (letter) with the given value.
- Use the order of operations rules: First multiply ( · ) and/or divide ( ÷ ) from left to right. Finally add ( + ) and/or subtract ( − ) from left to right.

**Q.** If  $q = 8$ , find the value of  $4q + 2$

**A.**  $4q + 2$  substitute  $q = 8$   
 $= 4 \cdot 8 + 2$   
 $= 32 + 2$   
 $= 34$

**a)** If  $w = 6$ , find the value of  $20 - 3w$

$= 20 - 3 \cdot 6$  Do × first  
 $= 20 - 18 = \boxed{2}$

**b)** If  $x = 2$ , find the value of  $5x + 1$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**c)** If  $m = 3$ , find the value of  $2 + 3m$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**d)** If  $x = 5$ , find the value of  $12 + 5x$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**e)** If  $a = 10$ , find the value of  $15 + 3a$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**f)** If  $b = 7$ , find the value of  $2b + 9$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**g)** If  $s = 3$ , find the value of  $7 + 11s$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**h)** If  $v = 4$ , find the value of  $9v - 8$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**i)** If  $h = 4$ , find the value of  $3h - 7$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**j)** If  $k = 7$ , find the value of  $35 - 4k$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**k)** If  $w = 2$ , find the value of  $8w - 5$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**l)** If  $u = 5$ , find the value of  $21 - 3u$

$=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**m)** If  $e = 9$ , find the value of

$\frac{e + 15}{8}$   
 $=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**n)** If  $s = 3$ , find the value of

$\frac{s + 4}{7}$   
 $=$   
 $=$   $=$   $\boxed{\phantom{00}}$

**o)** If  $c = 3$ , find the value of

$\frac{19 - c}{4}$   
 $=$   
 $=$   $=$   $\boxed{\phantom{00}}$

## Skill 21.4 Substituting negative values into expressions.

MMBlue 1 1 2 3 3 4 4  
MMGreen 1 1 2 3 3 4 4

- Substitute the variable (letter) with the given value.
- Use the order of operations rules: First multiply ( $\cdot$ ) and/or divide ( $\div$ ) from left to right. Finally add ( $+$ ) and/or subtract ( $-$ ) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** If  $z = -5$ ,  
find the value of  
 $z - 9$

**A.**  $z - 9$  *substitute  $z = -5$*   
 $= -5 - 9$   
 $= -14$

**a)** If  $e = -12$ , find the  
value of  $19 + e$

$$= 19 + (-12) = \boxed{7}$$

*19 has greatest absolute value  
19 is positive  $\Rightarrow +7$*

**b)** If  $y = -3$ , find the  
value of  $9y$

$$= \dots = \boxed{\phantom{00}}$$

**c)** If  $r = -2$ , find the  
value of  $6r$

$$= \dots = \boxed{\phantom{00}}$$

**d)** If  $n = -7$ , find the  
value of  $n + 8$

$$= \dots = \boxed{\phantom{00}}$$

**e)** If  $z = -9$ , find the  
value of  $4 - z$

$$= \dots = \boxed{\phantom{00}}$$

**f)** If  $h = -6$ , find the  
value of  $8 + h$

$$= \dots = \boxed{\phantom{00}}$$

**g)** If  $j = -2$ , find the  
value of  $8 - j$

$$= \dots = \boxed{\phantom{00}}$$

**h)** If  $v = -8$ , find the  
value of  $v - 5$

$$= \dots = \boxed{\phantom{00}}$$

**i)** If  $b = -5$ , find the  
value of  $7 + b$

$$= \dots = \boxed{\phantom{00}}$$

**j)** If  $b = -9$ , find the  
value of  $4b$

$$= \dots = \boxed{\phantom{00}}$$

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

$$= \dots = \boxed{\phantom{00}}$$

**l)** If  $i = -6$ , find the  
value of  $-5i$

$$= \dots = \boxed{\phantom{00}}$$

**m)** If  $a = -12$ , find the  
value of  $\frac{a}{4}$

$$= \dots = \boxed{\phantom{00}}$$

**n)** If  $e = -21$ , find the  
value of  $\frac{e}{3}$

$$= \dots = \boxed{\phantom{00}}$$

**o)** If  $c = -32$ , find the  
value of  $\frac{c}{8}$

$$= \dots = \boxed{\phantom{00}}$$

**p)** If  $s = -4$ , find the  
value of  $2 + 3s$

$$= \dots = \boxed{\phantom{00}}$$

**q)** If  $q = -3$ , find the  
value of  $7q - 5$

$$= \dots = \boxed{\phantom{00}}$$

**r)** If  $x = -9$ , find the  
value of  $5 - 2x$

$$= \dots = \boxed{\phantom{00}}$$

## Skill 21.5 Substituting two values into expressions involving + and -

MMBlue 11 2 2 3 3 4 4  
MMGreen 11 2 2 3 3 4 4

- Substitute the variables (letters) with the given values.
- Use the order of operations rule: Add (+) and/or subtract (-) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** If  $h = 5$  and  $i = -12$ ,  
find the value of  $h + i$

**A.**  $h + i$      *substitute  $h = 5$  and  $i = -12$*   
 $= 5 + (-12)$   
 $= -7$

**a)** If  $s = 9$  and  $t = 8$ ,  
find the value of  $s + t$

$= 9 + 8$       $=$

**b)** If  $m = 3$  and  $n = 7$ ,  
find the value of  $m + n$

$=$       $=$

**c)** If  $i = 10$  and  $j = 4$ ,  
find the value of  $i + j$

$=$       $=$

**d)** If  $y = 0$  and  $z = 12$ ,  
find the value of  $y + z$

$=$       $=$

**e)** If  $k = 14$  and  $l = 6$ ,  
find the value of  $k - l$

$=$       $=$

**f)** If  $g = 13$  and  $h = 7$ ,  
find the value of  $g - h$

$=$       $=$

**g)** If  $p = 13$  and  $q = 11$ ,  
find the value of  $p + q$

$=$       $=$

**h)** If  $n = 5$  and  $o = 8$ ,  
find the value of  $n - o$

$=$       $=$

**i)** If  $a = 6$  and  $b = 14$ ,  
find the value of  $a - b$

$=$       $=$

**j)** If  $h = 5$  and  $i = -12$ ,  
find the value of  $h + i$

$=$       $=$

**k)** If  $v = -8$  and  $w = 9$ ,  
find the value of  $v - w$

$=$       $=$

**l)** If  $f = -7$  and  $g = 3$ ,  
find the value of  $f - g$

$=$       $=$

**m)** If  $r = 2$  and  $s = -11$ ,  
find the value of  $r - s$

$=$       $=$

**n)** If  $a = -5$  and  $b = 7$ ,  
find the value of  $a - b$

$=$       $=$

**o)** If  $q = 6$  and  $r = -16$ ,  
find the value of  $q + r$

$=$       $=$

**p)** If  $t = 0$  and  $u = 6$ ,  
find the value of  $t - u$

$=$       $=$

**q)** If  $v = -14$  and  $w = 8$ ,  
find the value of  $v + w$

$=$       $=$

**r)** If  $w = 7$  and  $x = -9$ ,  
find the value of  $w - x$

$=$       $=$

**Skill 21.6** Substituting two values into expressions involving  $\cdot$  and  $+$

- Substitute the letters (variables) with the given values.
- Use the order of operations rules: Multiply ( $\cdot$ ) and/or divide ( $\div$ ) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** If  $q = 6$  and  $r = 8$ ,  
find the value of  $qr$

**A.**  $qr$  — substitute  $q = 6$  and  $r = 8$   
 $= 6 \cdot 8$   
 $= 48$

**a)** If  $e = 3$  and  $f = 7$ ,  
find the value of  $e \cdot f$

$= 3 \cdot 7$  =

**b)** If  $n = 4$  and  $o = 2$ ,  
find the value of  $n \cdot o$

$=$  ..... =

**c)** If  $b = 10$  and  $c = 3$ ,  
find the value of  $b \cdot c$

$=$  ..... =

**d)** If  $y = 2$  and  $z = 9$ ,  
find the value of  $yz$

$=$  ..... =

**e)** If  $g = 11$  and  $h = 4$ ,  
find the value of  $gh$

$=$  ..... =

**f)** If  $l = 3$  and  $m = 13$ ,  
find the value of  $lm$

$=$  ..... =

**g)** If  $s = 5$  and  $t = 6$ ,  
find the value of  $st$

$=$  ..... =

**h)** If  $w = 5$  and  $x = 8$ ,  
find the value of  $wx$

$=$  ..... =

**i)** If  $d = 7$  and  $e = 0$ ,  
find the value of  $de$

$=$  ..... =

**j)** If  $w = 30$  and  $x = 5$ ,  
find the value of  $w \div x$

$=$  ..... =

**k)** If  $v = 45$  and  $w = 9$ ,  
find the value of  $v \div w$

$=$  ..... =

**l)** If  $u = 22$  and  $v = -2$ ,  
find the value of  $u \div v$

$=$  ..... =

**m)** If  $a = 54$  and  $b = 6$ , find  
the value of  $\frac{a}{b}$

$=$  ..... =

**n)** If  $c = 72$  and  $d = 9$ , find  
the value of  $\frac{c}{d}$

$=$  ..... =

**o)** If  $k = 63$  and  $l = 7$ , find  
the value of  $\frac{k}{l}$

$=$  ..... =

**p)** If  $l = 0$  and  $m = 14$ ,  
find the value of  $9lm$

$=$  ..... =

**q)** If  $k = 4$  and  $l = -2$ ,  
find the value of  $8kl$

$=$  ..... =

**r)** If  $d = 5$  and  $e = 3$ ,  
find the value of  $7de$

$=$  ..... =

## Skill 21.7 Substituting two values into expressions involving +, −, · and ÷

- Substitute the variables (letters) with the given values.
- Use the order of operations rules: First multiply ( · ) and/or divide ( ÷ ) from left to right. Finally add ( + ) and/or subtract ( − ) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** If  $m = 8$  and  $n = 9$ ,  
find the value of  
 $m - 5 - n$

**A.**  $m - 5 - n$      *substitute  $m = 8$  and  $n = 9$*   
 $= 8 - 5 - 9$   
 $= 3 - 9$   
 $= -6$

**a)** If  $t = 6$  and  $u = 7$ ,  
find the value of  
 $2t + u$

$= 2 \cdot 6 + 7$   
 $= 12 + 7$      *Do × first*      $= \boxed{19}$

**b)** If  $d = 8$  and  $e = 3$ ,  
find the value of  
 $16 - d + e$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**c)** If  $h = 3$  and  $i = 7$ ,  
find the value of  
 $11 + h - i$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**d)** If  $i = 5$  and  $j = 6$ ,  
find the value of  
 $3ij$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**e)** If  $a = 3$  and  $b = 0$ ,  
find the value of  
 $8ab$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**f)** If  $m = 4$  and  $n = 1$ ,  
find the value of  
 $3m - n$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**g)** If  $m = 3$  and  $n = 2$ ,  
find the value of  
 $4m - 2n$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**h)** If  $b = 7$  and  $c = -5$ ,  
find the value of  
 $2bc + 30$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**i)** If  $g = 2$  and  $h = 9$ ,  
find the value of  
 $-2gh + 2h$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**j)** If  $a = 6$  and  $b = 3$ ,  
find the value of  
 $-4a + 5b$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**k)** If  $y = 3$  and  $z = 2$ ,  
find the value of  
 $\frac{9-y}{z}$

$=$   
 $=$       $= \boxed{\phantom{00}}$

**l)** If  $g = -2$  and  $h = 15$ ,  
find the value of  
 $\frac{h-7}{g}$

$=$   
 $=$       $= \boxed{\phantom{00}}$

## Skill 21.8 Substituting into expressions involving powers.

MMBlue 11 22 33 44  
MMGreen 11 22 33 44

- Substitute the variables (letters) with the given values.
- Use the order of operations rules: First evaluate all powers.  
Then multiply ( $\cdot$ ) and/or divide ( $\div$ ) from left to right.  
Finally add ( $+$ ) and/or subtract ( $-$ ) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** If  $i = 4$ ,  
find the value of  
 $2i^2 - i$

**A.**  $2i^2 - i$       *substitute  $i = 4$*   
 $= 2(4 \cdot 4) - 4$   
 $= 2 \cdot 16 - 4$   
 $= 32 - 4$   
 $= 28$

**a)** If  $x = 5$ ,  
find the value of  
 $40 - x^2$

$= 40 - 5 \cdot 5$       *multiply first*  
 $= 40 - 25 = 15$

**b)** If  $j = 8$ ,  
find the value of  
 $j^2$

$=$  .....  $=$

**c)** If  $m = 3$ ,  
find the value of  
 $8 + m^2$

$=$  .....  $=$

**d)** If  $c = 5$ ,  
find the value of  
 $4c^2$

$=$  .....  
 $=$  .....  $=$

**e)** If  $d = 7$ ,  
find the value of  
 $d^2 - 9$

$=$  .....  
 $=$  .....  $=$

**f)** If  $k = 4$ ,  
find the value of  
 $23 - k^2$

$=$  .....  
 $=$  .....  $=$

**g)** If  $z = 6$ ,  
find the value of  
 $2z^2 - 32$

$=$  .....  
 $=$  .....  
 $=$  .....  $=$

**h)** If  $y = 10$ ,  
find the value of  
 $2y^2 + y$

$=$  .....  
 $=$  .....  
 $=$  .....  $=$

**i)** If  $b = 4$ ,  
find the value of  
 $3b^2 + 7$

$=$  .....  
 $=$  .....  $=$

**j)** If  $t = 3$ ,  
find the value of  
 $4t^2 + t$

$=$  .....  
 $=$  .....  
 $=$  .....  $=$

**k)** If  $e = 7$ ,  
find the value of  
 $-2e^2$

$=$  .....  
 $=$  .....  
 $=$  .....  $=$

**l)** If  $n = 6$ ,  
find the value of  
 $\frac{n^2 - 6}{5}$

$=$  .....  
 $=$  .....  
 $=$  .....  $=$

## Skill 21.9 Substituting into expressions with brackets.

- Substitute the variables (letters) with the given values.
- Use the order of operations rules: First evaluate inside the brackets.  
Then multiply ( $\cdot$ ) and/or divide ( $\div$ ) from left to right.  
Finally add ( $+$ ) and/or subtract ( $-$ ) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** If  $r = 5$ , find the value of  $4(r - 2)$

**A.**  $4(r - 2)$       *substitute  $r = 5$*   
 $= 4(5 - 2)$   
 $= 4 \cdot 3$   
 $= 12$

**a)** If  $h = 2$ , find the value of  $3(5 + h)$

$= 3(5 + 2)$       *Do ( ) first*  
 $= 3 \cdot 7$        $= \boxed{21}$

**b)** If  $z = 6$ , find the value of  $4(12 - z)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**c)** If  $s = 3$ , find the value of  $s(7 + s)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**d)** If  $a = 7$ , find the value of  $5(a + 5)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**e)** If  $r = 5$ , find the value of  $4(r - 2)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**f)** If  $r = 9$ , find the value of  $r(2 + r)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**g)** If  $q = 2$ , find the value of  $9(q + 8)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**h)** If  $k = 4$ , find the value of  $k(k - 8)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**i)** If  $h = -5$ , find the value of  $4(h - 2)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**j)** If  $f = 9$ , find the value of  $6(f + 6)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**k)** If  $p = 6$ , find the value of  $p(2 - p)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**l)** If  $e = -2$ , find the value of  $e(e - 7)$

$=$   
 $=$        $= \boxed{\phantom{00}}$

**Skill 21.10** Substituting into formulae.

- Substitute the variables (letters) with the given values.
- Use the order of operations rules: First evaluate all powers.  
Then multiply ( $\cdot$ ) and/or divide ( $\div$ ) from left to right.  
Finally add ( $+$ ) and/or subtract ( $-$ ) from left to right.
- Determine the sign of the result. (see skills 13.7 to 13.10, pages 98 to 101)

**Q.** Use  $A = lw$  to find the area (A) of a rectangle where  $l = 3$  and  $w = 7$

**A.**  $A = lw$  — substitute  $l = 3$  and  $w = 7$   
 $= 3 \cdot 7$   
 $= 21$

**a)** Use  $F = ma$  to find the force ( $F$ ) where  $m = 5$  and  $a = 11$

$F = 5 \cdot 11 = \boxed{55}$

**b)** Use  $P = 5l$  to find the perimeter ( $P$ ) of a regular pentagon where  $l = 12$

$P = 5 \cdot 12 = \boxed{\phantom{00}}$

**c)** Use  $V = Bh$  to find the volume ( $V$ ) of a prism where  $B = 12$  and  $h = 4$

$V = 12 \cdot 4 = \boxed{\phantom{00}}$

**d)** Use  $A = l^2$  to find the area ( $A$ ) of a square where  $l = 9$

$A = 9^2 = \boxed{\phantom{00}}$

**e)** Use  $A = \frac{ab}{2}$  to find the area ( $A$ ) of a kite where  $a = 8$  and  $b = 7$

$A = \frac{8 \cdot 7}{2} = \boxed{\phantom{00}}$

**f)** Use  $D = rt$  to find the distance ( $D$ ) where  $r = 55$  and  $t = 2$

$D = 55 \cdot 2 = \boxed{\phantom{00}}$

**g)** Use  $A = bh$  to find the area ( $A$ ) of a parallelogram where  $b = 4.5$  and  $h = 4$

$A = 4.5 \cdot 4 = \boxed{\phantom{00}}$

**h)** Use  $P = 8l$  to find the perimeter ( $P$ ) of an octagon where  $l = 2.5$

$P = 8 \cdot 2.5 = \boxed{\phantom{00}}$

**i)** Use  $A = \frac{1}{2} h(a + b)$  to find the area ( $A$ ) of a trapezoid where  $h = 4$ ,  $a = 7$  and  $b = 3$

$A = \frac{1}{2} \cdot 4 \cdot (7 + 3) = \boxed{\phantom{00}}$

**j)** Use  $V = l^2h$  to find the volume ( $V$ ) of a square prism where  $l = 5$  and  $h = 4$

$V = 5^2 \cdot 4 = \boxed{\phantom{00}}$

**k)** Use  $V = l^3$  to find the volume ( $V$ ) of a cube where  $l = 5$

$V = 5^3 = \boxed{\phantom{00}}$

**l)** Use  $A = \pi r^2$  to find the area ( $A$ ) of a circle where  $\pi \approx 3.14$  and  $r = 10$

$A = 3.14 \cdot 10^2 = \boxed{\phantom{00}}$