

S1 Extension – Test 1 Revision

1. Multiples

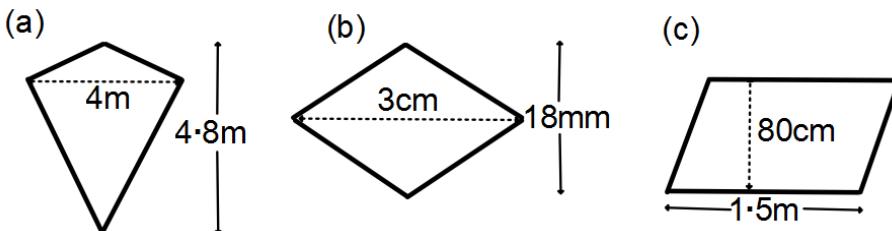
1. Find the lowest common multiple of :-
(a) 8 and 10 (b) 4, 6 and 9.

2. Expressions and Formulae

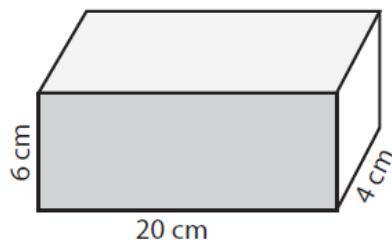
1. Evaluate the following expressions given that $a = 2$, $b=3$, $c=6$ and $d=8$.
(a) $ab - d$ (b) $\frac{c + bd}{5a}$ (c) $4b^2$ (d) $c(d + a)$
2. Multiply out each of the following:-
(a) $3(2x + 5)$ (b) $4(3 - 2y)$ (c) $a(b + 2)$
(d) $b(b - 1)$ (e) $m(7 + 4m)$ (f) $-2(p - 5)$
3. Expand and simplify the following:-
(a) $10 + 2(x - 3)$ (b) $3(2y + 1) + 5(y - 2)$ (c) $p(4 + p) - 3p$
(d) $7(3t + 2) - 4(2t + 3)$ (e) $6(c - 1) - 2(c - 5)$

3. Area

1. Work out the area of the kite, rhombus and parallelogram shown below.



2. Work out the surface area of this cuboid



3. Convert (a) 6cm^2 into mm^2 (b) 50mm^2 into cm^2
 (c) 2m^2 into cm^2 (d) 400cm^2 into m^2

ANSWERS

1. Multiples

1. (a) 40 (b) 36

2. Expressions and Formulae

1. (a) -2 (b) 3 (c) 36 (d) 60
2.(a) $6x + 15$ (b) $12 - 8y$ (c) $ab + 2a$ (d) $b^2 - b$ (e) $7m + 4m^2$ (f) $-2p + 10$
3.(a) $2x + 4$ (b) $11y - 7$ (c) $p^2 + p$ (d) $13t + 2$ (e) $4c + 4$

3. Area

1. (a) 9.6m^2 (b) 2.7cm^2 or 270mm^2 (c) 1.2m^2 or 12000cm^2
2. 448cm^2
3. (a) 600mm^2 (b) 0.5cm^2 (c) 20000 cm^2 (d) 0.04m^2