

$$2) B = \frac{(2^{15} + 2^{16})}{(2^{14} + 2^{16})}$$

$$= \frac{2^{15}(2+1)}{2^{14}(1+4)} = \frac{2 \times 3}{5} = \frac{6}{5}$$

$$= 1.2$$

$$B = 1.2 = 0.012 \times 10^2$$

B is a decimal number since it has a limited decimal part.

$$3) C = \frac{0.48 \times (10^3)^4 \times 0.001}{0.3 \times 10^{-4} \times 100}$$

$$= \frac{4^0 \times 3^1 \times 10^{-2} \times 10^{12} \times 10^{-3}}{3 \times 10^{-1} \times 10^{-4} \times 10^2}$$

$$= \frac{4^2 \times 10^{12} \times 10^4 \times 10}{10^2 \times 10^2 \times 10^3} = 4^2 \times 10^{10}$$

$$= 160000000000$$

$$= 1.6 \times 10^{11}$$

5th exercise

1) Draw a central angle $\widehat{MOB} = 60^\circ$, so it intercepts arc \widehat{MB}
 thus, $m\widehat{MB} = \widehat{MOB} = 60^\circ$

2) a) $\widehat{MOA} = \widehat{AOB} - \widehat{MOB}$ (A, O and B are collinear)
 $\widehat{MOA} = 180^\circ - 60^\circ$ (given) [adjacent supplementary angles]
 $\widehat{MOA} = 120^\circ$

but $OM = OA$ (radii in (C), M and A are points of (C) - given)
 then $\triangle MOA$ is isosceles at O having 2 equal sides (proved)

then, $\widehat{MAO} = \widehat{MOA} = \frac{180^\circ - \widehat{MOA}}{2}$ (sum of angles in any $\triangle = 180^\circ$)

$$= \frac{180^\circ - 120^\circ \text{ (proved)}}{2} = \frac{60}{2} = 30^\circ$$

P. 7. $\frac{1}{2}$