



PING YI SECONDARY SCHOOL
Perseverance Yields Success

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Class 312

Subject maths practice 2a

No. 11

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1a. $x^2(2x)$

$= 2x^3$

1b. $-5x(2x^2)$

$= -10x^3$

1c. $\frac{1}{3}y(6y^2)$

$= 2y^3$

1d. $-0.4s(-8s^2)$

$= 3.2s^3$

2a. $4m(3m^2-4m+1)$

$= 12m^3 - 16m^2 + 4m$

2b. $2p^2(p-\frac{1}{4})$

$= 2p^3 - \frac{1}{2}p^2$

$= 2p^3 - \frac{p^2}{2}$

2c. $-4x(3-x^2)$

$= -12x + 4x^3$

2d. $(3-4a-2a^2)5a$

$= 5a(3-4a-2a^2)$

$= 15a - 20a^2 - 10a^3$

3a. $(r-2)(r^2-3r+2)$

$= r(r^2-3r+2) - 2(r^2-3r+2)$

$= r^3 - 3r^2 + 2r - 2r^2 + 6r - 4$

$= r^3 - 3r^2 - 2r^2 + 2r + 6r - 4$

$= r^3 - 5r^2 + 8r - 4$

$$\begin{aligned}
 3b. \quad & (b^2 - 4b + 1)(2b + 4) \\
 & b^2(2b + 4) - 4b(2b + 4) + 1(2b + 4) \\
 = & 2b^3 + 4b^2 - 8b^2 - 16b + 2b + 4 \\
 = & 2b^3 + 4b^2 - 8b^2 - 16b + 2b + 4 \\
 = & 2b^3 - 4b^2 - 14b + 4
 \end{aligned}$$

$$\begin{aligned}
 3c. \quad & \left(\frac{1}{2}a - 3\right)(6 + 4a - 2a^2) \\
 = & \frac{1}{2}a(6 + 4a - 2a^2) - 3(6 + 4a - 2a^2) \\
 = & 3a + 2a^2 - a^3 - 18 - 12a + 6a^2 \\
 = & 3a + 2a^2 + 6a^2 - a^3 - 18 - 12a \\
 = & 3a - 12a + 2a^2 + 6a^2 - a^3 - 18 \\
 = & -9a + 8a^2 - a^3 - 18 \\
 = & -a^3 + 8a^2 - 9a - 18
 \end{aligned}$$

$$\begin{aligned}
 3d. \quad & (8 + y^2)(y - 2) \\
 = & 8y - 16 + y^3 - 2y^2
 \end{aligned}$$