

1.

i. $x^4 \times x^6 \times x$
 $= x^{4+6+1} = x^{11}$

ii. $2x^2 \times 3x^3 \times 2x$
 $= x^{2+3+1} = x^6$
 $= 2 \times 3 \times 2 = 12$
 $= 12x^6$

iii. $\frac{x^4 \times x^3 \times x^2}{x^9}$
 $= x^{4+3+2} = \frac{x^9}{x^9}$

$= x^0 = \textcircled{1}$

iv. $(3x^2)^3$
 $3^3 = 27$
 $x^{2 \times 3} = x^6$
 $= 27x^6$

v. $\sqrt{x} \times \sqrt{x}$
 $= x^{\frac{1}{2}} \times x^{\frac{1}{2}}$
 $= \cancel{x^{\frac{1}{2}}} x$

2.

2.

i. $15x - 2 = 12x + 9$
 $15x - 12x = 9 + 2$
 $3x = 11$
 $x = \frac{11}{3}$