



Year 7 Weekly Tutorial - 04

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1. Expand and simplify.

a) $-3(3x + 4) - 2(x - 5)$

b) $2a(a - 3) - a(a + 3)$

2. Factorize.

a) $x^2 - 5$

c) $3x^2y - 2xy^2$

e) $a^2b^3 - a^3b^2$

b) $2x^2 + 6x$

d) $12a^2 + 16a$

3. Simplify.

a) $2x^3 \times 3x^{-2}$

d) $\frac{12a^3b^2}{4ab}$

f) $\frac{32xy \times x^2y}{4x^2}$

b) $4a^{12} \times 3a^{-7}$

e) $\frac{15a^5 \times a^{-2}}{9a}$

c) $3xy^2 \times x^2y$

4. Find the values of the following.

a) $3^0 \times 3^2 \times 3^{-1}$

c) $\frac{5^5 \times 5^{-2}}{5^2}$

d) $\frac{4^3 \times 7^5 \times 4^2}{7^4 \times 4^4}$

b) $2^3 \times 3^5 \times 3^{-3}$

5. HCF and LCM of 80 and x are 16 and 320 respectively. Find x .

6. Solve.

a) $2(x - 1) + 3 = 7$

b) $5 + 2(x + 3) = -15$

c) $3(2x - 3) = 3x + 7$

d) $2(x + 5) - 5 = x$