

Lesson 8 -- HW

Factorise Completely:

(1) $a(c+4) + 5(c+4)$

(2) $3x + 3y + ax + ay$

(3) $a^2 - ac + ab - bc$

(4) $2pq - pr + 6q^2 - 3qr$

Simplify:

(5) $\frac{8a+8}{8}$

(6) $\frac{12x-6}{6}$

(7) $\frac{ax+ay}{2a}$

(8) $\frac{x^2+x}{3x}$

(9) $\frac{24p-p^2}{4p}$

(10) $\frac{x^2-x}{x-1}$

(11) $\frac{2m^2+mn}{2m+n}$

(12) $\frac{x^2-9}{x+3}$

(13) $\frac{x^2+5x+6}{(x+2)}$

Simplify

(14) $\frac{x-3}{4} - \frac{x+1}{5}$

(15) $\frac{3}{x-1} + \frac{1}{x+1}$

(16) $\frac{2x-1}{x+1} - \frac{x+2}{x}$

(17) $\frac{3}{x-4} - \frac{2}{x-1}$

Answers

$\frac{x+x^2-2x}{x+5} = \frac{-x}{x+5}$ (17)

$\frac{(1+x)x}{x-x^2+2x-2}$ (16)

$\frac{1-x}{x^2+x+2}$ (15)

$\frac{3x}{x^2-2x}$ (14)

$\frac{x+x}{x+3}$ (13)

$\frac{x-x}{x-1}$ (12)

$\frac{x}{x}$ (11)

$\frac{x}{x}$ (10)

$\frac{x}{x-4}$ (9)

$\frac{x}{x-1}$ (8)

$\frac{x}{x^2+2x}$ (7)

$\frac{x}{x^2+x}$ (6)

$\frac{x}{x-1}$ (5)

$\frac{x}{x+1}$ (4)

$\frac{x}{x+1}$ (3)

$(b^2+d)(c-b^2)$ (7)

$(a+b)(c-a)$ (6)

$(a+b)(c+a)$ (5)

$(a+b)(c+a)$ (4)

$(a+b)(c+a)$ (3)

HW - Lesson 9

2-UNIT

Factorise Completely:

1) $x^3 - x$

6) $a^3 - b^3$

2) $a^4 - a^2$

7) $a^3 + b^3$

3) $x^3 + 2x^2 - 15x$

8) $2ap^3 - 2aq^3$

4) $a^4 - 1$

* 9) $2ap^4 - 2aq^4$

5) $2ap^2 - 2aq^2$

10) $a^5 - 64a^2$

11) $m^3 + 27$

13) $1000 - y^3$

12) $m^3 - 8$

14) $8a^3 - b^3$

SIMPLIFY:

15) $\frac{x^2 + x - 6}{x^3} \div \frac{x^2 - 4}{x}$

16) $\frac{3b - 3c}{bc} \times \frac{bc}{b^2 - bc}$

SWERS!

1/ $x(x+1)(x-1)$	2/ $x(x+5)(x-3)$	3/ $x^2(x+1)(a^2+1)(a+1)(a-1)$	4/ $2a(p+q)(p-q)$
5/ $a^2(a^2-1)(a+1)(a-1)$	6/ $(a^2+ab+b^2)(a^2-ab+b^2)$	7/ $(a^2+ab+b^2)(a^2-ab+b^2)$	8/ $2a(p-q)(p^2+q^2)$
9/ $2a(p^2+q^2)(p+q)(p-q)$	10/ $a^2(a^2-4)(a^2+4a+16)$	11/ $(m+3)(m^2-3m+9)(b+m)$	12/ $(m-2)(m^2+2m-4)(-m+2)$
13/ $(10-4)(10+10q+4q^2)$	14/ $(3a-b)(4a^2+2ab+b^2)$	15/ $\frac{x^2(x+3)}{x^3}$	16/ $\frac{9}{8}$