

Question 2

$$1a) \frac{3 \cancel{m}^4}{2 \cancel{m}^2 n^2} \times \frac{1 \cancel{4}^4}{2 \cancel{8}^2 n^2}$$

$$= \frac{3}{2n} \times \frac{1}{2n}$$

$$= \frac{3}{4n^2}$$

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

$$= -3x^2 - 6x - 2x + 5$$

$$= -3x^2 - 8x + 5$$

$$2.a) \frac{12x - 24}{x^2 - x - 2}$$

$$= \frac{12(x-2)}{x^2 - x - 2}$$

Factorize

$$x^2 - x - 2$$

$$a=1, b=-2, c=-2$$

$$ac = -2$$

$$\text{Factor of } -2 : 1 \times -2$$

$$1x - 2$$

$$(x+1)(x-2)$$

$$= \frac{12(x-2)}{(x+1)(x-2)}$$

$$= \frac{12}{x+1}$$

$$c) \quad 3x^2 + 7x + 2$$

$$ax^2 + bx + c$$

$$a = 3, \quad b = 7, \quad c = 2$$

$$ac = 6$$

factorize of 6 : 1×6

: 2×3

+1	+6
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$$3x^2 + x + 6x + 2$$

$$= (3x^2 + x) + (6x + 2)$$

$$= x(3x + 1) + 2(3x + 1)$$

$$= (x + 2)(3x + 1)$$

$$d) \quad \frac{3b^3 + b}{2b} \div \frac{3b}{2}$$

$$= \frac{b(3b^2 + 1)}{2b} \times \frac{2}{3b}$$

$$= \frac{3b^2 + 1}{\cancel{2}} \times \frac{\cancel{2}}{3b}$$

$$= \frac{3b^2 + 1}{3b} \quad \#$$

checked
7/3/18