Q1

cows	Weight	days
↑ 14	↑ 63	↓ 18
x	770	28

$$\frac{x}{14} = \frac{770}{63} \times \frac{18}{28}$$

$$x = \frac{770 \times 18}{63 \times 28} \times 14$$

$x =$ _____

Q2

fans	days	machines ~~bicycles~~
↑ 560	↑ 7	↑ 20
x	12	18

$$\frac{x}{560} = \frac{12}{7} \times \frac{18}{20}$$

$$x = \frac{12 \times 18}{\cancel{560} \times 20} \times 560$$

$x =$ _____

Q3

Shirts	Price
↑ 80	↑ 2200
x	30

$$\frac{x}{80} = \frac{30}{2200}$$

$$x = \frac{30}{2200} \times 80$$

$x =$ _____

Q4 (a) Hamza spent on house rent = 20%

spent on domestic expenditure = 70%

Saving = 1800

Total income = ?

Let total income is = x Rs

x Rs = 20% x + 70% x

x = 90% x + Savings.

x% = $\frac{90}{100} x + 1800$

$100x = 90x + 180000$

$100x - 90x = 180000$

$10x = 180000$

$x = \frac{180000}{10}$

x Rs = 18000

$\frac{x}{100} = 18000$

$x = 180 \times 100$

$x = 18000$

(b) 70%

$= \frac{70}{100}$

$= \frac{7}{10}$

(c) = 15% × 600

$= \frac{15}{100} \times 600$

= 90

Q4 $\frac{7}{9}, \frac{1}{4}, \frac{13}{36}$

$36 \times \frac{7}{9}, 36 \times \frac{1}{4}, 36 \times \frac{13}{36}$

28, 9, 13

28, 13, 9

2	9, 4, 36
2	9, 2, 18
3	9, 1, 9
3	3, 1, 3
	1, 1, 1

$2 \times 2 \times 3 \times 3 = 36$

largest

$\Rightarrow \frac{7}{9}, \frac{13}{36}, \frac{1}{4}$

(b) Solve

(a) $= (7)^2 + x - (2 \times 4) \div 2$

$= 49 + x - 8 \div 2$

$= 49 + x - 4$

$= 49 - 4 + x$

$= 45 + x$

(b) $9 + 3 + 3 \times 2$

$= 9 + 3 + 6$

$= 18$

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

(d) $x^a \cdot x^b = x^{a+b}$

$= \frac{x^{a+b}}{x^{c-d}}$

$= x^{a+b-(c-d)}$

$= x^{a+b-c+d}$

(e) Convert into meters

$10cm$ $\quad 1cm = 100cm$

$= \frac{10}{100} m$

$= \frac{1}{10} m$

$= 0.1m$