INTERPRETTING ALGEBRAIC NOTATIONS

In the algebraic expression, $3\mathbf{p} + 4\mathbf{q} - \mathbf{r} + 12\mathbf{pqr} - 23$

a) How many algebraic terms are present?

Answer: ☐

b) Mention the constant term present in the expression.

Answer: ☐

c) What are the coefficients of **p, q** and **r**?

Coefficient of p = ☐

Coefficient of q = ☐

Coefficient of r = ☐

The price of a bottle of olive oil is \$12 more than $\frac{1}{5}$ of the price of a bottle of canola oil. Find the price of a bottle of olive oil if the price of a bottle of canola oil is

a) \$5

Olive oil = \$ ☐

b) \$**x**

Olive oil = \$ $\frac{\square}{\square}$

LIVEWORKSHEETS

Amir works 5 days a week. His daily wages are \$125. Find the wages earned by Amir in

a) 2 weeks = \$ ☐

b) x working days = \$ ☐

c) n weeks = \$ ☐

Simplify the following:

a) $21\mathbf{hm} \div 7\mathbf{hmn} = \frac{\square}{\square}$

b) $\mathbf{r} \times 6\mathbf{s} \div 27\mathbf{t} = \frac{\square}{\square}$

c) $2\mathbf{e} \times 3\mathbf{f} \times 4\mathbf{g} = \square$

Is $\mathbf{r} \times \mathbf{r} \times \mathbf{r}$ equal to $\mathbf{r} + \mathbf{r} + \mathbf{r}$?

- ○ True
- ○ False

LIVEWORKSHEETS

Write down an algebraic expression for each of the following statements:

a) Add 12 to the quotient of 2**s** divided by 18.

Answer: $\frac{\square}{\square}$

b) Multiple the quotient of 4**r** divided by 2**s** by 2.5**t**

Answer: $\frac{\square}{\square}$

c) Subtract 12.5**ab** from the product of 2**a** and 3**b**.

Answer: $\square$

d) Add the sum of **c** and **d** to the square of **e**.

Answer: c + $\square$ + $\square^{\square}$

Sierra baked 18 cup cakes of which two got burnt. She threw away the burnt cupcakes and distributed the remaining equally among her 4 children.

a) How many cupcakes did each child get?

Answer: $\square$ cupcakes

b) Write down an algebraic expression for the above situation if there were **p** cupcakes and **q** children.

Answer: $\frac{\square}{\square}$

LIVEWORKSHEETS

Write down an algebraic expression for each of the following statements:

a) Multiply the cube of **x** by the square of **y** and divide the product by $\mathbf{x^2y}$.

Answer: ☐

b) Multiply the quotient of $\mathbf{a^3b^4}$ divided by $\mathbf{a^2b^3}$ by 4**ab**.

Answer: ☐ ☐ ☐ ☐

c) Sum of heights of Ally and Cyra such that Ally is 2 times taller than Borita and Cyra is 4 times taller than Dora, given that Borita is **n** cm tall and Dora is **m** cm tall.

Answer: ☐ cm

The length of a rectangular window is 24 cm more than its width. If the width is x cm, find

a) the perimeter of the window

Answer: ☐

b) the area of the window

Answer: ☐

LIVEWORKSHEETS

A school distributed c packets of sweets among **d** pupils. If each packet contained **e** pieces of sweets,

a) How many sweets did each pupil get?

Answer: $\frac{\square}{\square}$

b) If the number of packets was increased by **f** units and **g** number of pupils were dropped from the list of those receiving sweets, find the number of sweets that each pupil got?

Answer: $\frac{\square \times \mathbf{e}}{\square}$

Sponsors of a health care event gave away free passes to senior citizens. Bob took his family to the event and bought tickets for \$23 per ticket.

a) How much did he pay for the tickets if 4 of his family members accompanied him to the event and 2 of them were his elderly parents?

Answer: \$ $\square$

b) How much did he pay for the tickets if **p** number of family members, including his 2 elderly parents, accompanied him to the event and the price per ticket was \$**q**.

Answer: \$ $\square$

LIVEWORKSHEETS

Mike has **x** dollar-notes in denominations of \$1, \$2 and \$5. There are **y** \$1 notes, 4**y** \$5 notes and the remaining are \$2 notes. Find

a) the number of \$2 notes in terms of **x** and **y**

Answer: ☐

b) the total value of all the notes if there are as many \$1 notes as \$2 notes in terms of **y**

Answer: \$ ☐

c) the total value of all the notes in terms of **y** if there are 2 \$2 notes for every 4 \$5 notes.

Answer: \$ ☐

LIVEWORKSHEETS

A couple had triplets. At birth, the body weight of the first baby was **x** pounds (1 pound = 16 ounces). The second baby weighed 14 ounces more than the first baby. The body weight of the third baby was 1.5 times that of the second baby. Write down the algebraic expressions, in terms of **x**, for

a) Weight of the first baby

Answer: [ ] ounces

b) Weight of the second baby

Answer: [ ] ounces

c) Weight of the third baby

Answer: [ ] ounces

d) Sum of the weights of the three babies

Answer: [ ] ounces

LIVEWORKSHEETS