

Chapter-18 Fundamental Concepts
Exercise 18A

1) Express each of the following statements in algebraic form:

- i) The sum of 8 and $2x$ is equal to y . $8+2x=y$
- ii) x decreased by 5 is equal to y . $x-5=y$
- iii) The sum of 2 and $2x$ is greater than y . $2+2x > y$
- iv) The sum of x and y is greater than y . $x+y < 24$
- v) 15 multiplied by m gives $3n$. $15m=3n$
- vi) Product of 8 and y is equal to $3x$. $8y=3x$
- vii) 30 divided by b is equal to p . $\frac{30}{b}=p$
- viii) z decreased by $3x$ is equal to y . $z-3x=y$
- ix) 12 times of x is equal to $5z$. $12x=5z$
- x) 12 times of x is greater than $5z$. $12x > 5z$
- xi) 12 times of x is less than $5z$. $12x < 5z$
- xii) $3z$ subtracted from 45 is equal to y . $45-3z=y$
- xiii) $8x$ divided by y is equal to $2z$. $8x \div y = 2z$
- xiv) $7y$ subtracted from $5x$ gives $8z$. $5x-7y=8z$
- xv) $7y$ decreased by $5x$ gives $8z$. $7y-5x=8z$

2: For each of the following algebraic expressions, write a suitable statement in words:

- i) $3x+8=15$ The sum of 3 times x and 8 is equal to 15.
- ii) $7-y > x$ 7 decreased by 4 is greater than x .
- iii) $2y-x < 12$ x decreased than two times of y is less
- iv) $5 \div z = 5$ 5 divided by z is equal to 5.
- v) $a+2b > 18$ a increased by $2b$ is greater than 18.
- vi) $2x-3y=16$ $2x$ decreased by $3y$ is equal to 16.
- vii) $3a-4b > 14$ $3a$ decreased by $4b$ is greater than 14.
- viii) $b+7a < 21$ b increased by $7a$ is greater than 14.

9x) $(16 + 2a) - x > 25$ | The sum of 16 and 2a decreased by x ^{is greater} 25.

x) $(3x + 12) - y < 3a$ | The sum of 3x and 12 decreased by y is less than 3a.